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BUREAU OF ECONOMIC AND SOCIAL INTELLIGENCE

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## Part I: Co-operation and Association

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### BELGIUM.

#### BILL FOR ORGANISING THE PROFESSIONAL REPRESENTATION OF AGRICULTURE AND THE INTERESTS OF THE AGRICULTURAL CLASSES.

##### OFFICIAL SOURCES:

DÉPOSITION DE LOI PORTANT ORGANISATION D'UNE REPRÉSENTATION PROFESSIONNELLE DE L'AGRICULTURE ET DES INTÉRÊTS DES CLASSES AGRICOLES (*Bill for the Organisation of the Representation of Agriculture and the Interests of the Agricultural Classes*). Chamber of Representatives. — Session 1912-13. Document No. 47.

PROJÉTÉ STATISTIQUE DE LA SITUATION DES ASSOCIATIONS D'INTÉRÊT AGRICOLE PENDANT L'ANNÉE 1911 (*Statistics of Associations of Agricultural Interest for the Year 1911*). Department of Agriculture and Public Works. Agricultural Division. — Brussels, Odry-Mommes, 1913.

##### OTHER SOURCES:

VERMANN (MAX): LES ASSOCIATIONS AGRICOLES EN BELGIQUE (*Agricultural Associations in Belgium*), Paris, Lecoq, 1909.

Among the bills of agricultural interest proposed in the later sessions of the Belgian Parliament, that which was brought in by Denis for the organisation of the professional representation of agriculture and the interests of the agricultural classes is among the most important, and deserves special notice. Belgium, like most other countries, is still without any special official representation of agriculture, that is, any elective administrative organisation for the defence of the interests of agriculture before



the public authorities to serve as an intermediary between them and the agriculturists. There are indeed agricultural comices and provincial agricultural societies, but these bodies, while generally regarded as institutions representative of the needs and interests of the rural classes, are, strictly speaking, excluded by their constitution and functions from the category of official representatives of agriculture. On the subject of special organisations answering to this special need, much discussion has taken place and many proposals have been made which will be here enumerated, because in many countries, as, for example, in Italy, the question is one of immediate interest and it is therefore desirable to make known the solution suggested in Belgium. We begin with a notice of the present administrative organisation of agriculture in Belgium.

#### § 1. FUNDAMENTAL OUTLINES OF THE PRESENT ADMINISTRATIVE AGRICULTURAL ORGANISATION IN BELGIUM.

The existing organisation of agriculture in Belgium includes the forms of association: (a) agricultural comices; (b) provincial agricultural societies; (c) the Superior Council of Agriculture.

The *agricultural comices* were instituted by Royal Decree on January 20th., 1848, organised by Decree of October 20th., 1849, and reformed by Decree of October 18th., 1880.

They are associations of agriculturists, each composed of at least 50 working members, and a certain number of honorary members. Any person desirous of becoming a working member of a society in a district must be domiciled there, or possess a farm in the district; he must be presented by two working members and pay an annual minimum subscription fixed by the Provincial Commission to be described later at from 3 to 5 francs, according to the province.

The comice is entrusted with the protection of agricultural interests in an area the limits of which are fixed by the Department of Agriculture. It bears the name of the locality selected for its ordinary meetings, which must be held at least twice a year.

Every comice appoints a committee of not fewer than seven members and not more than eleven to represent it and administer it. This committee must collect information for the report to be sent annually by the Provincial Commission of Agriculture to the Minister.

In 1911, according to the latest official statistical report of associations of agricultural interest there were in Belgium 167 comices, of which it may be useful to give the following details reproduced from the above mentioned statistical report:

*Situation of the Agricultural Comices at the Close of 1911.*

Province	Number of Comices	Number of Members	Revenue	Expenditure
Antwerp . . . . .	20	2,932	39,412	29,249
Brabant . . . . .	21	4,678	57,818	46,648
West Flanders . . . . .	13	2,915	41,582	38,656
East Flanders . . . . .	29	6,064	58,321	49,915
Hainault . . . . .	19	5,182	51,382	23,880
Liège . . . . .	15	5,484	43,002	25,722
Limbourg . . . . .	13	1,563	19,374	13,386
Luxembourg . . . . .	20	8,421	69,871	54,243
Namur . . . . .	17	2,513	38,211	26,054
	167	49,640	400,973	299,853

The chief work of these comices is to encourage agricultural progress through the institution of competitions, exhibitions, lectures and experimental farms. In the course of the year 1911 they organised in all 90 competitions, which taken together distributed in prizes the sum of 217,973 francs (1).

The comices of each province form a federation called the *Provincial Society of Agriculture*, occupying the second place in the organisation now under consideration. This federation is represented by the assembly of delegates from the comice, consisting of one member of the permanent deputatation of the Provincial Council chosen by the Governor of the Province, the president or vice-president of each comice and one member delegated by the comices for two years. This assembly meets generally only once a year, to consider the agricultural interests of its district and make grants from its central bank to the comices etc.

It appoints a *Provincial Commission of Agriculture*, entrusted with the ordinary administration of the society. This Commission is composed of one delegate from the Permanent Deputatation, a president and vice-president, and members varying in number from five to nine.

Its functions are more especially to facilitate current business, to pronounce opinion upon the agricultural progress of the province, to inform the Government of anything that may be prejudicial to local agriculture,

(1) See the "Exposé Statistique de la situation des associations d'intérêt agricole pendant l'année 1911" mentioned among the sources of this article.

and to send it an annual report on the subject. The Provincial Commission reports on its own work to the assembly of delegates.

Finally above all these organisations there is the *Superior Council of Agriculture*, instituted in 1834 and re-organised in 1845. This is a consultative body formed of two delegates elected for six years by each of the nine provincial societies of agriculture, together with 18 members appointed by the king, nine of whom represent the voluntary agricultural associations of the country, also for a term of six years, while the other nine are appointed each year.

This Council has not on the whole been very active nor very useful, but it must not be forgotten that among the questions studied by it have been those of agricultural insurance, livestock improvement syndicates, the reforms to be introduced into contracts for the lease of rural land, and especially the subject of the reform of the agricultural comices.

It has now been shown that the official representation of agriculture is in Belgium entrusted to three classes of organisation which may be considered as having emanated one from the other. The first, that of the agricultural comices, has been much criticised, and, in order to explain the spirit and scope of the proposed reforms, it is necessary to point out its two chief defects. In the first place there are objections to the mode of constitution, which is not elective, but is determined by the amount of taxes paid, and therefore one-sided and imperfect. Catholics and socialists are agreed on this point. From the statistics it appears that only 2.8 % of the total agricultural population is represented in these comices. It has been justly observed that the high contribution exacted by most of them from their own members excludes from the organisation agricultural labourers and small tenant farmers who form the largest part of the agricultural population. If the comices are really to represent its needs it is absolutely indispensable to reconstitute them on a wider and more democratic elective basis.

In the second place, many of the comices are accused of not fulfilling the mission entrusted to them, sometimes receiving considerable grants from the Government without rendering any benefit to agriculture. While some of the comices have been active in promoting technical agricultural progress, many others give no sign of life, take no initiative, and do not consider the needs of their district. In looking over the preceding table, it is seen that one striking feature is common to all the comices, viz. the small amount of their expenditure in comparison with their income. This perhaps shows that many scarcely know how to turn their resources to profit.

All this explains why, on many occasions, influential members of Parliament have demanded that the public grants should be more equally divided among the comices and the voluntary agricultural associations and why some of them have proposed the suppression of the comices, suggesting that the official representation of agriculture should be at once entrusted to the voluntary associations so widely developed in recent years. In the following section we shall consider some of the proposals which

different times and in different ways have been made in order to solve this delicate and important problem.

## § 2. THE PRINCIPAL PLANS FOR THE REFORM OF AGRICULTURAL REPRESENTATION.

The debates and discussions on the subject of the reform of agricultural representation, in Parliament, in the technical press and in congresses, turn upon one fundamental point, viz. whether the privilege of the official representation of agriculture should be confirmed to the present comices or conferred on the voluntary agricultural associations exclusively, whether and how it should be divided between the two classes of associations. Opinions are divided: some wish the comices to be preserved for the purpose of this representation, of course after they have been reformed; others give their preference to the voluntary associations, chiefly on account of their greater development, and others propose intermediate solutions. The proposals submitted to the Superior Council of Agriculture reflect these different currents of opinion, some basing the representation on the voluntary associations, others instituting an agricultural representation independent of them. Let us glance for a moment at the two groups of plans, and then devote a special section to the recent proposal proposed by Denis.

(A) *Proposals based on voluntary associations*: (1) *Jacques and Renard proposal*. According to this, the present comices would be preserved without substantial modification of their organisation, but with improvements and extended powers, voluntary associations being granted representation in the Superior Council of Agriculture.

(2) *Mellaerts Proposal*. Unlike the foregoing, this proposes to entrust the representation of agricultural interests in every canton exclusively to official agricultural professional unions recognised by the law of March 31st., §§ (1) and to the delegates of such unions. These would form provincial chambers, which, in their turn, would elect delegates, who with other members would compose the Superior Council. The agricultural comices would thus be excluded from official representation, but would still exist for the encouragement of agriculture by means of competitions and exhibitions.

(3) *Proposal for a Central Section in the Chamber of Representatives*. This idea dates from 1901 and is thus summarised in the report on the agricultural accounts for that year: "The present limits of the comices, corresponding with those of the cantons, would be maintained. There

<sup>1)</sup> For the constitution, the objects and the importance of professional unions in Belgium, see our article in the Bulletin of August, 1914, pp. 1, et seqq.

would therefore be as many comices as there are now, and perhaps more. In every comice there would be delegates from local associations in the different communes of the canton; each association appointing a number of delegates in proportion to the number of its members. The total number of delegates would appoint the members of the board of management of the comice, and the total number of comices would constitute the Provincial Society of Agriculture. At the same time, the much disputed question of the representation of the voluntary associations in the Superior Council of Agriculture would be solved. For this it would be sufficient for the provincial societies to appoint members who, with the commissioners appointed by the Government, would form the Council."

But the above report does not say clearly whether the present comices, or only their present limits would continue to exist, nor what associations would eventually constitute with them the agricultural representation.

(4) *The Vliebergh Proposal* (1909). This is substantially the same as that of Mellaerts: the comice however would in this case be composed of delegates from all the agricultural associations recognised by law within its district. Among these would be included not only unions of agriculturists and agricultural labourers, but also syndicates for livestock improvement and beet cultivation, co-operative dairies, mutual livestock insurance societies, co-operative societies for the purchase of the requisites, co-operative societies for the sale of agricultural products for their members, societies of agriculturists for the collective use of machinery, and in general every society of agriculturists or peasants with an agricultural object recognised by the justice of the peace, with whom the final decision as to the agricultural character of the associations.

(5) *Francois and d'Otreppe Proposal*. This is an attempt to merge the comices and the voluntary societies. That is to say, the comices, societies and provincial commissions would still exist, but above all there would be a provincial chamber composed of a commission emanating from the comices and of an equal number of delegates appointed by voluntary societies. This chamber would be substantially a new organisation intended to take the place of the present provincial commissions, the functions of which would henceforth be purely administrative. No voluntary societies would be considered as such, except those for insurance and credit, co-operative societies for purchase and sale, and agricultural professional unions all of which must have obtained legal recognition. As regards the voluntary societies, this proposal is less liberal than the preceding one. In the constitution of the Superior Council, the delegates of the comices and of the voluntary associations would have an equal share, and the members nominated by the Government would be retained, but their number would be proportionately reduced.

(6) *The Proposal of the Superior Council of Agriculture*. (Decree of 10th., 1908, and January 27th., 1909). This resembles the foregoing, allowing however the voluntary societies a larger share in the provincial organisation of agricultural representation. It would be always society

agricultural interest with headquarters in the province and civil society that alone would have voting rights, but to the insurance credit societies, co-operative societies of purchase and sale and agricultural professional unions, livestock improvement syndicates would be added.

(B) *Proposals to Constitute Agricultural Representation Independently of Voluntary Societies.* In this group are included all proposals which aim at giving a democratic character to the representation of the rural classes, by calling on all persons directly interested in agriculture to join in constituting it. The chief proposals submitted to the International Agricultural Congress of 1895 were of this kind, as was also that of Niemcewicz, of 1894, on which for the sake of brevity we avoid dwelling. Only one proposal of the kind, that of De Villermont, was submitted to the Superior Council of Agriculture but he was compelled to withdraw it in the session of December 13th., 1908, because its radical character excited vigorous opposition. According to it, none of the older organisations should be allowed to continue, but in every commune a comice should be appointed to which all cultivators should belong, registered if necessary independently of their own act. Besides this, a cantonal society of agriculture should be founded, consisting of delegates from the comices and also a provincial society of agriculture formed of delegates of cantonal societies; finally, the Superior Council should be appointed by delegates from the provincial chambers.

Having enumerated these, we pass on to the bill proposed by Denis. This is also connected with the second group of proposals which tend to establish an elective system of representation of agriculture on a larger basis.

### § 3. THE DENIS BILL.

This bill was brought before the Belgian Parliament in the session of December 6th., 1912. Its essential aim is to secure to all classes interested in agricultural production a system of direct representation.

For this purpose, agricultural comices would be instituted throughout the whole extent of the cultivated land and their districts would be fixed so as to correspond with the characteristics and the natural limits of the various agricultural districts in the country.

In these comices there would be represented: (1) proprietors who are cultivators; (2) proprietors who are cultivators; (3) tenant farmers; servants and labourers on farms, and peasants of both sexes, employed in any kind of labour.

The following persons without distinction of sex, if they have reached the age of 21, would have a vote for the election of these various classes of representatives of agricultural interests: (1) every proprietor who within the district of the comice lets out to tenants not less than 50 ares of

land ; (2) every agriculturist who is proprietor of more than half the land he cultivates ; (3) every tenant farmer who rents more than half the land he cultivates ; (4) every paid labourer who works for the proprietor or manager of a farm, chiefly occupied in agriculture, livestock improvement, horticulture, forestry etc.

The first two groups of electors would form one single electoral college. Voting would be compulsory and no one would have more than one vote.

Every comice would be composed of : (a) two representatives from each of the three electoral colleges, for every rural commune within its limits, whatever be the population of the commune ; (b) and besides, in the case of each of the three colleges, one representative for every 50 inhabitants according to the last census of the population without distinction of sex or condition, whether farmers, scientific agriculturists, horticulturists, sylviculturists, landed proprietors, peasants, servants or others employed on farms, in horticulture, sylviculture etc.

The principle of proportional representation would prevail in the elections to agricultural comices separately for the various classes of candidates.

The comices would also include : (1) representatives of the staffs of associations of agricultural interest such as syndicates, co-operative societies, insurance societies, etc ; (2) labourers employed in such associations ; (3) contractors for special or temporary labour, reaping, weeding, threshing etc. ; (4) labourers directly employed by such contractors ; (5) professors of agriculture or engaged in teaching the subject in the district of the comice, as well as veterinary surgeons, chemists, agricultural engineers, and doctors working in country districts.

The managing staff of agricultural associations would be included in the electoral body of the second and third classes above mentioned according as the land in the locality is generally let to tenant farmers or worked by the proprietor. Labourers on the land are included in the 4th class. Contractors for special agricultural work and the labourers they employ would be classified according to the same system. The representation of each class would correspond with the number of delegates.

Lastly, every elector would be eligible in his own class and his representatives are elected for four years.

It was desired that not only agriculture should be represented, but also science, both in its connection with agriculture and with the conditions of physical and intellectual development of the rural classes, considering the great importance science applied to agriculture has acquired in modern times.

To this complex organisation, Denis in his bill assigns a vast program of investigation and a wide sphere of action, not merely consultative but also practical and positive. According to him the principal objects of the comices should be the following :

(a) to take into special consideration the interests of local agriculture and of the rural classes, establishing if necessary a permanent system of inquiry into their situation and conditions ; (b) to make known to

public authorities the needs of agriculture, and the desires of the rural classes; (c) to supply the administrations with useful information as to the interests of agriculture and the rural classes, to assist in the compilation of agricultural statistics and to give advice on various questions submitted to them by the public authorities; (d) to consider as a whole the relations between proprietors and managers of landed property and the introduction of legal reforms, or reforms of contracts, especially in regard to the duration of contracts for the lease of land, and compensation to the tenant for improvements in his holding; also to examine custom-house and fiscal regulations as well as transport rates in regard to landed property, agriculture and agricultural industries; (e) to encourage the extension of agricultural and land credit, professional unions, co-operative societies and societies for insurance against agricultural risks, as well as to improve the economic and social conditions of the rural classes, especially of peasants etc.

To the comices the bill also assigns special functions viz. to aid in the organisation of the agricultural labour market, to forestall and to remove, through mediation, conciliation and arbitration, the difficulties and conflicts that might arise more especially between landlords and tenants, and between employers and peasants, to fix rents, to seek for improved systems of lease and draw up model contracts, and examine into the more improved forms of contract for individual and collective labour etc.

In order effectually to perform these complicated duties, the comice would be divided into four sections corresponding with the various interests represented; viz. (1) landed property; (2) agriculture, silviculture and horticulture; (3) labour; (4) scientific and agricultural instruction; each of these being divided into various branches.

Each section or sub-section would deliberate separately on its special subjects, reserving questions of general interest for the decision of the comice.

In connection with the programme of work above described the comice would have also two conciliation chambers. The first would consist of delegates of the representatives of landowners and tenant farmers in equal proportion; the second of delegates of tenant farmers and of their servants and labourers, also in equal proportion.

These chambers would endeavour to forestall and decide peaceably questions that may arise between landlords and tenants about the lease of land and between cultivators or tenant farmers and peasants about labour.

The comices would have power to form a federation the better to attain their objects.

As to the provincial societies of agriculture, the bill proposes that they be formed of two delegates for each of the three electoral colleges above mentioned, and of two delegates of the class including teachers of agricultural subjects, doctors, veterinary surgeons, agricultural engineers etc.



These societies would occupy themselves with all the subjects and regulations specified above, of interest for agriculture and the rural classes within their own district.

Lastly, the Superior Council of Agriculture would occupy itself with all the interests of national agriculture and of the rural classes, as well as with all the measures connected with agricultural progress and the improvement of the condition of the rural classes.

It would be formed of delegates from the provincial societies, the Government having power to appoint delegates with right to speak but not to vote at the meetings, selecting them from special lists drawn up by the Academy of Sciences.

## FRENCH COLONIES AND PROTECTORATES.

### MISCELLANEOUS NEWS.

1. — AGRICULTURAL CO-OPERATION IN FRENCH WEST AFRICA. — A decree of June 29th., 1910 had authorised the formation in French West Africa of agricultural thrift, mutual aid and loan societies among the natives. The results obtained have been so remarkable that there are now more than 300,000 adherents belonging to ten societies in Senegal and six in Guinea. A new Decree of January 8th., 1915 aimed at still further extending their action.

The first article of this Decree assigns the following duties to the societies:

1st., to ensure the formation of reserves of grain to be selected and kept at the disposal of the members with a view to providing seed at the proper time ;

2nd., to aid in the improvement of agricultural conditions and the quality of the agricultural produce and the harvest, as well as in the fight against the propagation of parasitic affections by which the produce suffers ;

3rd., to purchase agricultural implements or such as are required for the immediate transformation of agricultural produce and place them at the disposal of the members under conditions laid down by the Board of Management of each society ;

4th., to assist their members with grants in money or in kind, making provision for their defence against the effects of drought, inundations, epidemic cattle disease and other natural calamities, assisting them in case of illness or accident ;

5th., to organize long term mutual agricultural loans in kind or in money. These loans, which are independent of the usual advances to members, are granted either to individuals or to groups or collective bodies."

The formation of these societies is decreed by the Governor General in the circles or regions where the local government judges it possible ; and, once a society has been founded in a circle, all the native farmers and livestock improvers resident in the district must become members of it. A report made by M. Doumergue, Minister for the Colonies, states that in French West Africa as in North Africa, societies of this kind are only borned and prosper when initiated and promoted by the administrators.

(Summarised from *Journal d'Agriculture pratique* of April 15th., 1915).

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2. — AGRICULTURAL ASSOCIATION IN CHAOUIA. — The custom that seems to be prevailing in regard to the utilisation and colonisation of Morocco is that of farming in association with the natives, as direct farming seems up to now to be left to those societies alone that dispose of large capital.

An excellent example of the results obtained by indirect farming is afforded by the work of a French farm established among the Oulad Saïd (Chaouia), which, cultivated in association with *Khammès*, gave a return of 50 % on the capital invested in the year 1911, a very good agricultural year, 15 % in 1912, an average year and only suffered insignificant loss in 1913, a worse year than had been known for a long time.

The form of the contract entered into with the *Khammès* in these regions is as follows :

The *Tadjer*, or proprietor, who takes a *Khammès* into his service, provides him with an Arab plough, a yoke of oxen, seed, food for himself and for livestock. For a week of actual work, the *Khammès* can claim a double decalitre of wheat or barley. Sometimes the master gives his employee advances to be repaid in kind at the time of harvest.

The *Khammès* receives at the harvest the fifth of the produce in return for his work and care. One of the advantages in employing a *Khammès* is that the proprietor does not suffer by the fluctuations of the labour supply at harvest time, as the employee undertakes all the agricultural work. But it is absolutely necessary for the proprietor to reside on the farm, in order to supervise the *Khammès*, who, otherwise, would not scruple to sell the seed and appropriate to himself the food intended for the plough oxen ; the continual presence of the *Tadjer* also incites the *Khammès* to fulfil all the clauses of his contract punctually and to respect his engagements.

(Summarised from *Bulletin Economique de Maror*, published by the *Service Economique* of the *Résidence Générale*, November-December, 1913).

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3. — INSTITUTION OF NATIVE THRIFT SOCIETIES IN MOROCCO. — As in all Mussulman countries, usury is rife in Morocco. In his improvidence the native, deprived of his means of subsistence by a bad harvest, does not hesitate to contract loans at heavy interest, which speedily bring him to ruin and the loss of his land. Hence the necessity for the institution in Morocco of native mutual aid and loan societies, on the basis of those which have been able to restore the *fellaheen* in Algeria and Tunis to prosperity and comfort, has been occupying the attention of the Protectorate Service.

At an early date, the regional commanding officers and civil magistrature will be called on to institute in their districts thrift associations on the following lines :

Every society shall have as many sections as there are tribes in the territory; each one shall conduct its business separately and be provided with its capital and an interest account.

The society shall be managed by a council of members of *djemaa*, with the *caïd* as president. At the military or civil control head quarters there shall be a board of management presided over by the Caliph of the Sultan, the vice-president being appointed by the superior authority. The *caïds* and the *chioukh* shall have seats on the board. A secretary and treasurer shall also belong to the board.

The members shall be bound to pay an annual contribution of 2 pesetas hassani (1) per *charrue* (2) ploughed. The amount shall be paid at the date of termination of the harvest. A delay may be granted, however, by the Administrative Council, on the proposal of the *djemaa*, to members temporarily in difficulties, but this delay may not be prolonged beyond the date of the next harvest. The Regional Administrative Council may even excuse payment of the annual contribution by those members whose insolvency is notified by the *djemaa*.

The loans will be granted at the rate of 5 % per annum, and in proportion to the area cultivated and the funds the borrower has at his disposal, and they will be repayable at the date of the harvest.

After consultation with the *djemaa*, the Regional Administrative Council may grant assistance varying with the requirements, to such members whose precarious situation calls for it.

(Summarised from *Bulletin Economique du Maroc*, published by the *Service Economique* of the *Résidence Générale*, September, 1913).

(1) The French 5 franc piece is about 6 pesetas hassani 25.

(2) The *charrue* is about 8 or 10 hectares.

## SPAIN.

### CO-OPERATION IN SPANISH AGRICULTURE.

(Continued) (1).

#### § 6. CO-OPERATION FOR PRODUCTION AND SALE.

##### (a) *Syndicates of orange-growers.*

We have seen the important position to which rural banks and co-operative societies for mortgage credit have attained in Spain as a consequence of their wide development and activity. With these must be mentioned the syndicates of orange-growers, which in regard to their co-operative organisation, are of no less importance. It may truly be said that these syndicates constitute the most perfect form of agricultural co-operation in Spain.

Co-operative associations among citrus fruit growers, which take the form of syndicates, are of recent origin and exist only in the eastern part where almost the whole orange-crop of the peninsula is produced (2). In fact before the year 1908 in Castellón there were some syndicates of this nature, but they were defective in organisation and their action was limited. No syndicates however, were in full vigour until the end of that year, when at Valencia, the principal growers united with the more important representatives of the rural class to discover a remedy for the bad condition of their trade, which general opinion attributed to their defective system of sale and exportation of produce.

The good seed of co-operative organisation was sown in this union, and was fostered by the movement of rural association due to the recent promulgation of the law of 1904 and of its definite provisions added in 1908. New syndicates arose in the principal orange-growing centres and these were all soon united in a Federation. It was certainly not an easy

(1) The first part of this article appeared in the number of this bulletin for March, 1913 pp. 10-27.

(2) The provinces of Valencia and Castellón devote respectively about 20,000 and 10,000 ha. to the cultivation of citrus fruit, the produce of which in Spain, where it is the third most important crop, represents an average annual value of from 70,000,000 to 75,000,000 pesetas.

matter to induce agriculturists to sacrifice their independence for the common good but praise-worthy propaganda for this end was carried on, and among those most especially active in this work we must mention Señores Lassala, Sarthou, and Letteir.

To give a comprehensive idea of these associations, we shall briefly describe the regulations of that of Mijares de Villareal (*Sindicato naranjero del Mijares de Villareal*) which was taken as a model by the greater number of those afterwards established.

This syndicate, as well as all the others, is constituted in conformity with the law of January 28th., 1906, to unite, prepare and sell in common the oranges grown by its members.

The syndicate undertakes the charge of the exportation and sale of the fruit in accordance with the established rules and each member must have all his plantations registered.

Every year before the fruit season begins, the syndicate opens a register in which all the parcels belonging to members and approved by the Committee, with their extent and other particulars, are duly entered and described. In no case may a member reserve to himself the right to sell the oranges grown in any of these registered plots to any other person or association whatever.

When the time for gathering the fruit comes, each member must declare the quantity of oranges in each of his registered plots, and this is duly noted. After this registration the oranges are no longer the private property of the grower; they pass to the group and are henceforth completely under the control of the Committee of Management, even in the case of the plots changing owners.

Every year the Committee fixes the price for each class of fruit, which remains unchanged during the entire season. Then, as the fruit is gathered and counted, it is classified as "choice" or first class, 2nd. class and 3rd. class. Some days before it is gathered, experts appointed by the committee go to the plots and classify the fruit.

The gathering is made either all at once or in parts according to the rules laid down by the Committee as to size, class, ripeness, condition, and other particulars. Every day the owner receives a receipt for the quantity taken away, and the price per thousand; to the price per thousand oranges a certain sum is added as compensation for depreciation and damages dating from February 1st., according to a scale fixed every year at the first general meeting (1). At the final settlement these compensations are not taken into account.

The Syndicate must see that the orange harvest is completed on May 31st.

If the market and available funds permit, the administration may grant the advances it considers it is able to those members who

(1) The scale established by the Syndicate of Mijares de Villareal for 1913-14 varied from 0.70 pesetas on February 31d. to 28 pesetas on June 30th.

ask for them. The harvest finished, the annual payments are made and all obligations incurred by the syndicate are settled out of the profits arising from the sale.

But whether the accounts show profits or losses, all gains or losses must be equally shared by the members according to the number of thousands of oranges which each has contributed to the common stock. The syndicates are directed by managing committees with extensive powers for the use of which they must account to the members' general meeting which assembles in ordinary session twice a year in the month of October to draw up its programme and appoint a Committee of Management and again at the end of the harvest for the settlement of accounts.

The following figures show the increase of members in the eastern districts :

Seasons	Number of Syndicates
1908-09 . . . . .	7
1909-10 . . . . .	13
1910-11 . . . . .	14
1911-12 . . . . .	19
1912-13 . . . . .	22
1913-14 . . . . .	24

The Federation of orange-growers was formed in 1909 by the various associations for the purpose of studying the markets, providing for importation, arranging for the distribution and forwarding of goods etc. Already mentioned, there are 24 federated co-operative societies with 3,211 members (1).

The aims of the Federation are more especially :

(1) Purchase in common of manures, machinery, materials and appliances for combating diseases of orange trees ;

(1) The associations forming the Federation are at present : The co-operative society of orange growers of Burriana, del Este, "Victoria" of Castellón, "La Unión" of Alcira, of Alfaro, of Petres, "El Ideal" of Algar, "El Servol" of Vinaroz, "La Fama" of Torrevicente, "El Fenix" of Algar ; the first co-operative society of orange-growers of Sagunto ; the agricultural syndicates of Mijares of Villarreal, "El Progreso" of Algar, "Esperanto" of Benavites, of Carlet, of Algines, "El Campo" of Puebla de Vallbona ; co-operative society for exportation of Onda ; syndicate of mutual co-operation and protection of Benigno of Espioca ; agricultural and co-operative society of Benaguacil ; agricultural circle of Cazorla ; syndicates of orange-growers of Nules, Villarreal and Gandia ; the agriculturists' association of Castellón.

- (2) Utilisation of residuum from the orange plantations;
- (3) Purchase and manufacture of materials for the preparation of the fruit;
- (4) Mutual insurance against risks of transport by sea and land ;
- (5) Organisation of transport ;
- (6) Establishment of agencies, appointment of representatives for sales abroad ;
- (7) Organisation of commercial missions for study on home and foreign markets ;
- (8) Study and defence of the agricultural interests of the co-operative societies belonging to the Federation.

We may say that all these various objects have already been realised. The Board of the Federation enters into an agreement with the head harbour-porter for the shipment of the fruit, and with navigation companies in regard to the freights for each season and the delivery of the fruit on the different markets. At the more important ports the Federation has agents who receive consignments of fruit which they sell by auction.

Mutual insurance against risks only began during the last season, so we have no particulars in regard to it at present, but from the information which the manager of this branch, Señor Sarthou, has kindly given us, it seems to have been very successful.

The Federation carries on other forms of business, but of these we shall mention only one, that is onion-growing. This was undertaken at the request of some of the members and is still only in its infancy.

The following table gives some particulars as to the export of oranges in the season 1911-12 with the names of the associations sending them and their destination ;



TABLE IV. — *Number and Destination of Cases Exported in*

Name of Association	London	Liverpool	Manchester	Hull	Bristol
Co-operative Society of Orange Growers of Burriana . . . .	712	43,714	6,368	—	2,911
Agricultural Syndicate of Mijares de Villareal . . . . .	3,974	29,080	2,349	—	2,338
Co-operative Society for Exportation, of Onda . . . .	160	2,761	933	4,840	1,097
Syndicate of Orange Growers of Villareal . . . . .	2,088	3,855	2,927	200	1,052
Syndicate of Orange Growers of Gandia . . . . .	5,611	—	—	—	—
First Co-operative Society of Orange Growers of Sagunto .	1,203	795	—	—	—
Co-operative Society of Orange Growers, « Victoria » of Castellón . . . . .	—	417	1,143	1,165	100
Co-operative Society of Orange Growers, « Bolena » of Torrelblanca . . . . .	—	2,039	149	311	395
Co-operative Society of Orange Growers, « La Union » of Algimia . . . . .	69	—	—	—	—
Agricultural Syndicate, « El Progreso » of Algar . . . .	409	69	—	—	—
Co-operative Society of Orange Growers of Petrés . . . . .	1,296	217	—	—	—
Co-oper. Soc. of Orange Growers « El Ideal » of Benavites .	125	—	—	—	—
Co-operative Syndicate of Benifayó . . . . .	167	161	—	—	181
Co-oper. Soc. of Orange Growers « El Servol » of Vinaro . .	—	1,189	—	—	416
Agriculturalists' Association of Castellón . . . . .	300	495	2,084	12,210	551
Agricultural Syndicate, « Esperanto » of Benavites . . . .	114	406	—	114	—
Total . . . .	16,228	85,224	15,953	18,840	9,271

*Associations Composing the Federation of Orange-Growers*

Newcastle	Hamburg	Bremen	Antwerp	Amsterdam	Rotterdam	Total
1,678	23,258	3,921	4,507	12,154	3,561	108,387
2,413	5,142	3,841	1,000	1,879	759	57,483
893	15,519	550	3,272	610	651	32,065
1,021	3,055	1,940	2,675	2,512	2,448	25,650
—	513	—	—	—	—	6,124
—	5,054	—	4,455	2,018	—	14,544
—	2,783	130	1,336	200	591	8,123
168	5,121	488	1,154	—	126	10,944
—	360	—	929	490	—	1,818
—	1,763	172	901	255	—	3,560
—	3,147	868	1,333	907	—	7,838
—	848	—	1,068	670	—	2,711
—	1,356	—	264	326	—	2,455
218	2,736	550	289	129	—	6,091
—	7,104	1,612	6,629	—	1,854	32,839
—	120	—	355	499	—	1,608
6,391	77,879	14,082	30,167	23,579	9,996	322,279

The 322,279 cases exported and sold according to this table in 1911-12 contained an average of 620 oranges per case, that is in all about 200,000,000 of an approximate value of 3,500,000 pesetas.

(b) *Other co-operative societies for production and sale.*

Though the co-operative societies for raising citrus fruit are, as we have said, the most important in Spain, yet there are others, both for production and sale, of which the chief are composed of wine-growers, dairy men and sugar manufacturers.

Co-operative wine-making is not frequent in Spain. One of the most important societies of the kind is that of Carmen (Criptana). Its capital is formed of 200 shares of 75 pesetas each. Every shareholder must contribute to the society 4,000 kgs. of grapes for every share he holds. The shares are in the name of the holder, and can not be transferred without the consent of the other members.

The grapes supplied to the society by its members are paid for at the market price. The profits are shared among the members unless the society considers it desirable to devote them to the purchase of machinery.

There are some other very important co-operative societies for wine-making such as that of the syndicate "Alella Vinicola", founded by the associations composing the federation of wine-growers of the north-east of Spain.

The first effort to form a co-operative dairy in Spain is quite recent. Its result is the society called the "Queseria Manchega" (the Cheese Factory of La Mancha) founded at Infantes in 1913. We have no direct information in regard to its organisation and work, but it seems to have been modelled on similar societies in Switzerland. The results obtained have so far been satisfactory; in fact the breeders of cattle in different rural centres propose to follow the example of the *Queseria Manchega*.

Co-operative sugar factories in Spain have generally given satisfactory results. In most of these the shareholders must also be agriculturists who agree to contribute to the factory a certain quantity of beet-root for each of the shares held by them. The profits are divided in proportion among the shareholders.

In other co-operative societies it is not necessary for every member to be an agriculturist. In these, agriculturists supply the raw material as purchase price of shares; those who are not cultivators purchase shares; they must however, in addition, advance 500 pesetas for each share of 1,000 pesetas, for the cost of manufacture. This advance of supplementary funds is repaid at the end of the season. Among the most important co-operative societies may be mentioned those of San Isidro and of the Purísima Concepción, both of which are established at Grenada.

These forms of co-operation for production and sale are not yet widely developed in Spain; probably the most important are the co-operative sugar factories.

We may add that some attempts at co-operative farming have been made in Extremadura, but they have not as yet been very successful.

## § 7. CO-OPERATIVE PURCHASE.

It may be asserted that in Spain there is no agricultural association which does not either continually or occasionally make purchases in common of farm requisites, manures, seed etc. Collective purchase is therefore the most usual form of co-operation in agriculture in Spain. But though it is common to nearly all rural unions very few have any special organisation for this work. What has been affirmed of co-operative manifestations in general is true in this case, viz. that in most cases co-operative purchase supplies the casual necessities of rural associations already formed without any regular or permanent organisations.

Nevertheless, nearly all district and diocesan agricultural federations and others of the more important associations have special sections for co-operative sale.

When a federation receives from its subordinate associations lists of goods required it calls for tenders from the producers of such goods. Thus the producers are placed in direct communication with the federation, which acts as the representative of its subordinate societies. In practice this system meets with opposition, through the natural repugnance of the cultivator to make engagements in advance. To obviate this difficulty, some associations to be hereafter described purchase on their own account manures, seed and implements, which they have reason to believe their members will probably need, and these they sell at a price, which, while always lower than the current market price, yet generally gives a small profit for the federation. But the want of the necessary organisation generally precludes resort to this system.

The federations which effect the greatest number of co-operative purchases are the following; the "Mirobrigense" (Ciudad Rodrigo, province of Salamanca), with thirty syndicates, to which belong more than 300 agriculturists, making collective purchases of raw material amounting annually to more than 900,000 kgs.; the Federation of Catholic Agricultural Syndicates of La Rioja established at Logroño, with 73 federated syndicates, the purchases of which amounted in 1913 to 583,646 pesetas (1);

	Amount in pesetas
(1) The goods supplied by the Association to the syndicates in 1912 were:	—
American vines (grafts, rooted and other cuttings) . . . . .	9,386
Seed (21,720 kgs.) . . . . .	6,925
Trees (1,663) . . . . .	932
Machines (sorters, presses, harrows, etc) . . . . .	3,095
Apparatus used in vine growing (pulverisers, spraying machines etc) . . . . .	1,947
Sulphate of copper (11,458 kg.) . . . . .	27,287
Flowers of sulphur (67,348 kg.) . . . . .	16,636
Spring manure (120,700 kg.) . . . . .	20,533
Autumn manure (2,376,500 kg.) . . . . .	353,689
Articles of consumption . . . . .	116,000
Other articles . . . . .	27,216
Total . . . . .	583,646

the Federation of Valladolid; the Montañesa (Santander); that of the diocese of Burgos, and others.

Besides the Federations, there is an agricultural association of great importance for its collective purchases, viz. "The Association of Agriculturists of Zaragoza". Its system is the following; it buys goods without any preliminary engagement on the part of its members, who afterwards purchase from it such goods as they need at a price which covers only the cost at the centre of production or charged by the importing firm, and that of carriage and storage.

This association has 3,100 members distributed among 303 localities. The services it renders to them are shown in the following tables:

TABLE V. — *Account of the manure in stock, and bought and sold by the Association during the year 1913-1914.*

<i>Dr.</i>	<i>Amount in pesetas</i>
In stock on April 1st. . . . .	16,964.85
Manure bought during the year . . . . .	670,335.55
Carriage by rail . . . . .	39,951.40
Porterage . . . . .	4,646.60
Rent of stores . . . . .	2,700.00
Salaries . . . . .	4,737.50
Insurance premiums. . . . .	128.20
Wages of workmen, sacks, receptacles, etc. . . . .	1,797.10
Total . . . . .	732,261.20

*Cr.*

Manure sold (5,115,022 kgs.) . . . . .	723,061.75
In Stock (155,404 kgs.) . . . . .	24,397.95
Total . . . . .	747,459.70
Profit . . . . .	15,198.50

TABLE VI. — *Account of seeds in stock and those bought and sold by the Association during the year 1913-1914.*

<i>Dr.</i>	Amount in pesetas
In stock on April 1st., 1913 . . . . .	3,191.95
Seed bought during the year . . . . .	29,679.35
Carriage by rail . . . . .	589.55
Porterage . . . . .	173.80
Sacks and packing cloths . . . . .	450.00
Workmen, bags . . . . .	614.65
Wear and tear of machinery and repairs . . . .	76.55
Total . . . . .	34,774.95
<i>Cr.</i>	
Seed sold . . . . .	31,388.55
Received for sorting 1,137 kgs. of corn belonging to the members . . . . .	475.50
In stock . . . . .	3,747.45
Total . . . . .	35,611.50
Profit . . . . .	836.55

Previous to the constitution of this association, the consumption of chemical manure in the neighbourhood of Zaragoza was unimportant. While this was partly due to the want of technical instruction among the agriculturists it is not the less true that the small results obtained by those who tried the effect of the manures had also an influence. This is explained by the fact that the agriculturists had to buy the manures through unscrupulous intermediaries, who in order to realise large profits generally sold manures of bad quality and not adapted either to the land or to the crops for which they were intended.

The Association of Agriculturists of Zaragoza has not only supplied manures of good quality, but has instituted an agricultural laboratory which gives advice, and analyses earth, seeds, etc. for the members. Now that the agriculturists are convinced of the advantages to be obtained from the use of manures adapted to their land and their crops, a constant increase is observed in the consumption of these manures by the members of the

Association. The following figures show the continual increase in the consumption of manures during the ten years from 1900 to 1910.

TABLE VII. - *Increase in the amount of manure supplied by the Association in the years from 1900 to 1910.*

Years	Manures Supplied (kgs.)
1900-1901 . . . . .	116,333
1901-1902 . . . . .	299,974
1902-1903 . . . . .	371,144
1903-1904 . . . . .	1,130,841
1904-1905 . . . . .	1,151,593
1905-1906 . . . . .	1,643,707
1906-1907 . . . . .	1,760,137
1907-1908 . . . . .	2,709,186
1908-1909 . . . . .	3,395,867
1909-1910 . . . . .	3,928,638

This short account must not be closed without mention of the "Agricultural Syndicate of Jelo", which deserves notice for its co-operative purchases of agricultural machinery, the "Agricultural Syndicate of Pilota" well known for its supplies of manure and seed and for its selected breed ing stock; the Syndicates of Casbas, of Villa de Hecho and others worthy of notice for their co-operative purchases in general.

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From this brief sketch a general idea may be formed of the condition of agricultural co-operation in Spain. Undoubtedly there is still much to be done, especially if comparison be made with the development of this branch of co-operation in those countries which are at the head of agricultural progress. However, it is certainly true that if we consider the special conditions of the country, the idiosyncrasies of the rural classes, and the state of agricultural technique, factors which in the rural districts of Spain often form obstacles to the association movement, we must acknowledge that rural co-operation in this country has of late made remarkable progress, and attained perfection of form in the syndicates of orange-growers, and in the rural banks of Extremadura above described.

Certain advocates of agricultural co-operation have for some time feared that an *isolation in the midst of association* would arise, that is an isolation of the associations, in view of the fact that general federations are slow to constitute themselves. On the other hand, others maintain that such fears are premature, considering that a general federative organisation ought to be the product of a degree of development not yet attained by most co-operative societies in rural Spain.

But in fact the progress made of late by the co-operative movement in Spain shows that it is really developing and so far from pausing is steadily advancing in proportion to the appreciation of the advantages to be obtained by its means.

We may therefore hope that with the aid of the public authorities, agricultural co-operation in Spain will soon reach the position it ought to hold in a country where the cultivation of the land is the chief source of wealth



## NOTICES OF SOME RECENT PUBLICATIONS RELATING TO CO-OPERATION AND ASSOCIATION.

GREAT BRITAIN AND IRELAND.

ADSETT (W. H.): AGRICULTURAL CO-OPERATION. A series of six articles in *Co-operative News*, Vol. XLVI, Nos. 4-9, January 23rd.-February 17th., 1913.

The writer, in a series of short articles, describes the growth and present position of the different branches of agricultural co-operation in England and Wales. Inevitably his account of the development of the movement is largely a record of the work of the Agricultural Organisation Society, and he acknowledges the assistance he has received, in the preparation of his material, from Mr. J. Nugent Harris the secretary of the Society.

He deals with co-operation in the poultry and dairy industries, with small holdings and credit societies, and with the work of the few large purchase and sale societies which exist in England and Wales. His final article is devoted to a discussion of the proper relation between the agricultural co-operative societies and the distributive stores, — between, that is to say, the organised producers in the villages and the organised consumers in the towns. Since 1908, energetic efforts have been made to develop mutual trading between these two branches of the co-operative movement. Joint conferences of the representatives have been held and, quite recently, three sub-committees have been appointed, for England and Wales, Scotland, and Ireland respectively. Inter-trading between agricultural co-operative societies and industrial and distributive co-operative societies amounted in value, in 1913, to a total of £229,416. The question of arranging inter-trade relations is one of peculiar difficulty upon which the writer is entitled to speak with authority, and it is a matter for regret that the final article of the series is so short.

## ITALY.

FEDERAZIONE SICILIANA DELLE COOPERATIVE. LA COOPERAZIONE AGRICOLA IN SICILIA NEL 1914 (*Sicilian Federation of Co-operative Societies. Co-operation in Sicily in 1914*). Girgenti, Sicily, 1915, pp. 32.

This is a report on the progress made by the "Federazione Siciliana delle cooperative" of Girgenti in the year 1914, by its General Secretary, Prof. Enrico La Loggia. From this publication we learn that, at the end of 1914, the federated societies were 56 with 11,257 members. They are mostly land credit banks, acting as intermediary organisations for the Bank of Sicily, for its land credit business. The deposits they had received amounted on the 31st. of December, 1914 to 763,700 frs. and their capital to 1,849,179 frs. Their total reserve funds amounted to 91,593 frs.; as against 12,871 frs. in 1913.

In 1914, the work of the special "Azienda-concimi" (*Manure business*) connected with the Federation was considerable, as may be seen from the following figures: goods and machinery, receipts, 239,278 frs.; goods and machinery, expenditure, 246,200 frs.; banking business, 89,379 frs.; bills discounted, 85,868 frs.; general business done, 60,715 frs.; superphosphates delivered, 226,129 frs.; machinery and implements, 7,990 frs.; seeds 3,887 frs.; various manures and antiegyptian materials, 8,194 frs.; net profits, 2,667 frs.

## VARIOUS COUNTRIES.

PEARSON (RAYMOND A.): *AGRICULTURAL ORGANISATIONS IN EUROPEAN COUNTRIES*, New York State Department of Agriculture Bulletin, No. 66, pp. 451-636. Ill. Albany, N. Y., December, 1914.

The author of *Agricultural Organisations in European Countries* was for nearly four years Commissioner of Agriculture of the State of New York. On retiring from that position, early in 1912, he was requested by the Governor to visit Europe for the purpose of studying agricultural conditions there, and prepare a report of his observations with special reference to agricultural co-operation. His report — the present volume — is a somewhat superficial description of the chief agricultural organisations in practically every country in Europe in which co-operation has made any progress at all. The volume is illustrated by a large number of photographs which help very greatly to give reality to the author's descriptions.

In an introduction to the report Dr. Pearson calls attention to a number of considerations which it is important to emphasise in view of the fact

that the report itself is intended to be in the nature of a guide to farmers in the United States who are seeking for forms of co-operation adapted to their particular needs. He points out, in the first place, that successful co-operative societies have never been founded without hard work upon the part of the promoters, even in those cases where some obvious advantage was to be obtained through combined action. He calls attention to the fact that in America retail and other dealers often conduct their business on a very narrow margin of profit, and that, where this is so, there is little to be gained through co-operative buying or selling. Finally, he insists that co-operation can only succeed if responsibility is placed directly upon the individuals who compose the societies, since only thus is it possible to secure the personal interest and activity which are essential

## Part II: Insurance and Thrift

### AUSTRIA.

#### HAIL INSURANCE IN 1913.

##### SOURCE:

DAN LINDÖRFER (Dr.): Report submitted to the Chamber of Commerce and Industry of Lower Austria and an article on the same subject in No. 2,058 of the "*Walmanns Versicherungs-Zeitschrift*" of Berlin.

In 1913 the number of persons insured against hail in all the Austro-Hungarian Monarchy showed a remarkable diminution, a decrease of about 1,000 policies for the Provincial Institute of Lower Austria and a similar decrease for the societies limited by shares in Lower Austria; in Upper Austria a decrease of 708; in Salzburg 163, in Bohemia 1,175, in Moravia 665, in Galicia 1,790 and in Hungary 11,642. A tendency to diminution had shown itself in 1912; this increased in 1913 with a marked reduction of the value insured and the amount of premiums. But we must observe that the diminution was not in proportion to the number of persons insured, because it affected principally small and very small amounts. Of the 11,642 policies less taken out in Hungary, 82 % corresponded with those of peasants insuring for sums under 2,000 crowns, and 11 % with sums of from 2,000 to 6,000 crowns; in the district of Vienna the entire loss was in amounts not exceeding 6,000 crowns and in Bohemia almost entirely in amounts of less than 10,000 crowns. So to this we must attribute the fact that the insured capital did not suffer the reduction which might be expected from the smaller number of

policies. The loss was rendered less appreciable in some provinces or it was compensated for in the increased amount of the premiums which the societies had to ask because of the unfavourable state of hail insurance business.

The causes of this decrease in business which contrasts sharply with the increase of the transactions of other branches of insurance may be found chiefly in the state of the weather in the autumn of 1912, and in the whole of 1913. The humidity of the autumn greatly hindered farm-work in winter, in parts rendering it totally impossible. In certain districts of Bohemia where beet is grown the winter sowing of corn was delayed because the beet crop was still in the ground in November and December and the sowing of summer wheat and barley could not be made until the first months of the new year. But the winter of 1912-13 was not favourable to any sowing. When fine weather came at the end of March and beginning of April, work was resumed, but soon the temperature again changed. The return of the cold hindered the development of vegetation and had a consequently unfavourable effect on the number of policies taken out by farmers. Thus in Bohemia especially where hail insurance had for some years been profitable, the experience previously made was confirmed that in those places where little hail had fallen, the farmers neglected to insure, and as regards Hungary the stimulus of the very serious and numerous hailstorms of the preceding year was now wanting. Besides, we shall remember that though the general financial condition of the country inclined the farmers to save, yet the depression had also its effect on this branch of insurance.

In relation also to this subject we must mention that among the large Hungarian proprietors another cause began to effect insurance against hail. Among the sugar manufacturers there was a project for insuring their beet crops in turn, from time to time or year by year, by means of syndicates for mutual insurance. The first advocate of this idea was the late Baron Joseph de Hatvany but after his death the movement subsided. We do not know, however, whether it is quite abandoned or whether it may be again taken into serious consideration and acted on. The bad results hitherto obtained in Hungary from hail insurance are certainly not encouraging to the advocates of such a scheme for, according to the statistics of Iranyi, the Austro-Hungarian societies lost in 1878 and later over hail insurance 22,459,000 crowns or 4 % of the net premiums paid.

In spite of all this, however, the financial results of hail insurance were not unfavourable. Though in Moravia the claims absorbed more than 100 % of the premiums, in Bosnia and Hungary the societies obtained profits by no means despicable, though the brilliant hopes for the year were not realised — hopes which in Hungary especially existed even until July.

With regard to the meteorological conditions of 1913 affecting hail insurance, the hail storms in the mountain districts during the month of June were violent, and the claims in these districts absorbed more than half of the income from premiums. The weather afterwards was not such as to improve the situation.

Bohemia was completely free from meteorological disasters, and to this fact may be attributed the good financial position of the hail insurance societies there. Galicia suffered severely in 1913, especially in June and August, and here the expenditure quite swallowed up the income.

In Hungary, hailstorms in July seriously damaged the harvest, but the returns for the year were better than were expected and there was some profit gained by the societies which, as we know, suffered the loss of a million in 1912. In the branch insuring "fruit" all over Austria there was a falling off of business, and the insurance of tobacco in 1913 did not give good results by reason of the bad seasons and violent hailstorms.

The following table shows the number of policies issued by the insurance societies in the countries of the monarchy of the greatest importance for this branch of insurance, together with the sums assured; it contains also the figures necessary to ascertain the extension of hail insurance, and at the same time permits of a comparison of the yield from hail insurance according to the territory or the district concerned.

	Number of Societies to which the Data Refer	Number of Insured Persons	Amount Assured	Premiums Paid	Number of Persons Suffering Losses	Claims Paid
over Austria . . . .	7	5,695	13,901,500	313,743	1,075	237,488
pper Austria . . . .	7	6,145	10,656,400	166,094	502	48,764
alzburg . . . . .	7	601	718,400	17,610	4	233
ohemia . . . . .	7	8,806	51,909,410	2,012,698	2,521	751,690
loravia . . . . .	7	6,864	31,871,000	671,373	1,530	679,433
lesia . . . . .	7	1,592	5,432,000	92,877	180	50,970
Galicia and Bucovina	4	7,065	54,907,555	1,533,588	1,031	718,771
Hungary and depend- ent territories . . .	9	67,134	363,512,944	10,319,751	22,153	6,286,434

The societies have granted to farmers the right of insuring grain already cut and bound, up to ten days after cutting, by means of a slight addition to the premium, and this concession has been widely taken advantage of by agriculturists.

The fluctuations in the amount of premiums of the national societies from 1887 to 1912 is as follows:

1887	Crowns	19,473,172	1900	Crowns	16,746,780
1888	"	17,281,146	1901	"	17,377,124
1889	"	19,050,596	1902	"	17,613,445
1890	"	16,341,862	1903	"	17,909,735
1891	"	14,805,268	1904	"	19,304,562
1892	"	14,720,670	1905	"	20,325,967
1893	"	12,331,564	1906	"	23,076,443
1894	"	13,874,440	1907	"	20,754,449
1895	"	12,710,550	1908	"	25,071,262
1896	"	13,845,032	1909	"	26,892,794
1897	"	15,470,194	1910	"	30,492,463
1898	"	19,284,444	1911	"	29,019,867
1899	"	20,062,026	1912	"	30,886,740

The average value of insurance policies in Bohemia in 1913 was 5,891 crowns against 5,859 in 1912, and 4,909 in 1911; in Lower Austria, in Upper Austria, in Salzburg, Moravia and Silesia, 3,551 crowns against 3,339 in 1912; in Galicia, 7,913 crowns against 6,673 in 1912, and 7,743 in 1911; in Hungary 5,114 crowns against 5,032 in 1912, and 5,000 in 1911.

## DENMARK.

### I. INSURANCE AGAINST ACCIDENTS IN AGRICULTURAL WORK IN RECENT YEARS.

#### § 1. THE BILL FOR THE REFORM OF THE EXISTING LEGISLATION.

In Denmark, the first law dealing with insurance against accidents in work dates from 1898. It was concerned with the accidents befalling industrial workers, for, in this country, as elsewhere, this was the first category of workers for whom provision was made, as, being the most exposed to risks and, existing in populous centres, it was able more easily to attract the attention of the legislator (law of January 7th., 1898; supplementary laws of May 15th., 1903, and December 1st., 1913). The insurance of fishermen was afterwards provided for (April 3rd., 1900; supplementary law of March 30th., 1906); that of sailors (April 1st., 1905) and only in the last place was any similar measure adopted on behalf of labourers engaged in agriculture, horticulture and sylviculture (May 27th., 1908). In a word, we have to do with a gradual development; on the one hand, owing to the absence of the statistics necessary to establish the frequency and amount of the various accidents, and, on the other, because the insurance against accidents in work constitutes a problem of such gravity and connected with so many and such important interests, it was not possible to introduce it at once for all the categories of workers. The multiplicity of laws could not fail to bring about a certain disparity in the treatment of accidents. In 1898, when the first law was passed, insurance against accidents in work was still a new thing, the successive laws were inspired by different motives dictated gradually by the experience of insurance in Denmark or elsewhere. To eliminate this disparity between the various laws, as well as the defects which had been revealed in each of them; to harmonise in a single organism the different branches of accident insurance; to extend the obligation and benefits of insurance (now that it was more possible approximately to establish the risks) to new categories of workers; such were the aims that demanded a remodelling and revision of the legislation and led to a bill for an organic law which was laid before Parliament on January 14th. of the present year. This bill



does not aim at effecting any violent change in the existing legislation, but only at unifying, completing and perfecting it (1). The fundamental principle that inspires it is, that every employer is bound to compensate the persons in his employ for any accidents arising in the course of their work, or from the work itself.

In this manner, according to the new bill, all the workers are in principle subjected to insurance. Purely occasional workers are excepted, but it is important to note that this exception does not extend to casual agricultural workers. In all these respects the bill in question does not conflict with the previous laws, but enlarges their scope; especially inasmuch as it does away with the limit previously established for the minimum importance of the undertaking.

As far as agriculture is concerned, while according to the law in force (May 27th., 1908) the obligation of insurance for workers receiving regular wages and for occasional workers (including the superintendent who does not receive an annual salary above 1,500 crs.) ceases when the value of the farms as shown in the cadastre is less than 6,000 crowns, in the bill this minimum limit is abolished. By this means, the legal inequality between the workers on small and on large farms is removed, as the disparity of treatment has gradually become less justifiable, with the ever increasing industrialisation, not only of large but also of small holdings, and the consequent increase of accidents on small farms.

The bill reaffirms the principle that the master is not directly to undertake the risk (in view of the possibility of his being unable to pay the compensation) but is to transfer it to some institute authorised for the purpose. On the other hand, an important innovation is introduced regarding the institute of insurance, for though only applying it in the case of the insurance of sailors and fishermen, the bill introduces the principle of the compulsory formation of consortiums among masters in the same line of work. Such consortiums, analogous to the "Berufsgenossenschaften" of Germany, owing to the wise spirit of prudence animating Danish legislation, would only be compulsory for the present in the case of the above mentioned occupations, but the rule could subsequently easily be extended to others including agriculture.

The number of persons for whom insurance is compulsory under the new bill is increased very considerably. In fact, while in Denmark small holdings are very numerous, the methods of their cultivation are highly intensive and require the employment of many labourers. While at the present time compulsory insurance is in force for about 110,000 farms, it will have to be extended, if the bill becomes law, to 80,000 more, of which the value is estimated as less than 6,000 crowns. The agricultural workers for whom insurance will be compulsory will amount to about 380,000. Adding 160,000 persons who may be voluntarily insured according to the provisions, there will be, in the case of agriculture alone, a total of

(1) See especially "Årsrapporten", Insurance Review, Copenhagen Nos. 1 and 2 of 1910.

140,000 persons whose insurance is provided for in the bill in question. We shall not speak further regarding the latter, it suffices to have mentioned it and we shall wait till the bill becomes law before discussing its tenor, at length.

We shall, however, set forth the results obtained under the existing law, taking the necessary data from the report published annually by the agricultural division of the Council of Labourers' Insurance (1). This report, although those for previous years have been considered, always deserves attention on account of its wealth of data and the extraordinary interest of the statements it contains.

## 2. INSURANCE AGAINST AGRICULTURAL ACCIDENTS IN DENMARK IN 1913.

(1) *The frequency of accidents.* — The necessity of providing compensation for accidents to agricultural labourers is shown by the constantly increasing number of cases notified to the Council and dealt with by it since the passing of the law of May 27th., 1908.

A. *Compulsory insurance.* — In 1909, we find 550 claims for compensation; in 1910, 1,978; in 1911, 2,312; in 1912, 2,370; in 1913, 2,418. Of the 2,418 claims brought before the Council, 265 (11 %) were rejected as not coming under the head of the cases contemplated by the law of 1908.

Of the remaining 2,153 considered, 1,178 were not cases giving claim to compensation, since the injured person reacquired his full capacity for work.

There thus remained 977 cases to be considered, of which 55 were fatal.

Of these 55 fatal cases, in 38 there were heirs having a right to assistance; in 15 there were heirs possessing the right to compensation for a total amount of 35,000 crowns; in three cases only partial compensation was given, amounting in all to 1,700 crowns.

Comparing these figures with those of other years since the coming into force of the law, we get the following table :

(1) Beretning fra Arbejderforikrings-Raadets Landbrugsafdeling for Aaret 1913. See also our Bulletins of June, 1911, October, 1912 and May, 1914.

TABLE I. — *Accidents and Compensation for Compulsory Insurance.*

	Number of Fatal Cases	Cases in which the Survivors had a Right to Compensation		Amount of the Compensation Paid as		• Total Compensation Paid — (crowns)
		Total Compensation	Partial Compensation	Total Compensation — (crowns)	Partial Compensation — (crowns)	
1909 . . . . .	26	12	—	30,000	—	30,000
1910 . . . . .	65	24	6	60,000	3,100	63,100
1911 . . . . .	89	39	7	97,500	3,600	101,100
1912 . . . . .	61	25	4	62,500	2,200	64,700
1913 . . . . .	55	14	3	35,000	1,700	36,700
1909-1913 . . . . .	296	114	20	285,000	10,600	295,600

It would be interesting to be able to explain the reasons for the great difference in the fatal accidents in the different years and why there were far more in 1911 than in the other years; but no such explanation is furnished by the report in question. The same is the case in regard to the persons whose working capacity has been permanently reduced 10 per cent, or more, by injury (others have no right to compensation). In fact the compensation required for such cases amounted in the different years to the following sums:

1909 . . . . .	10,332	crowns
1910 . . . . .	305,496	"
1911 . . . . .	425,340	"
1912 . . . . .	401,088	"
1913 . . . . .	368,676	"
1909-1913 . . . . .	1,510,932	crowns

In 1913 the degree of disablement produced and the compensation paid were as follows:

Diminution of Working Capacity	Cases	Compensation
10 % . . . . .	183	65,880 crowns
11-15 " . . . . .	147	73,224 "
16-20 " . . . . .	71	50,112 "
21-25 " . . . . .	51	45,900 "
26-50 " . . . . .	55	70,740 "
51-75 " . . . . .	24	56,340 "
76-99 " . . . . .	1	2,880 "
100 " . . . . .	1	3,600 "
	533	368,676 crowns

To these 368,676 crs. must be added 25,000 crs. paid under the head of additional compensation according to the revised judgment pronounced by the Insurance Council.

*B. Voluntary insurance.*—As has already been said, insurance is voluntary in the case of persons engaged in work for the proprietor or the manager of an estate of which the value as shown in the cadastre does not exceed 6,000 crowns, or engaged in agriculture, sylviculture, or horticulture, or the owner, or tenant, of such an estate, or the husband of such an owner or tenant. It is so in a word for all cultivators who are not subject to compulsory insurance, viz., hired workers, or as often occurs on such small farms, persons who are at the same time employers and workers, under which head is also included the wife of the proprietor, or manager. The frequent occurrence of accidents on these small holdings justifies the provision included in the bill extending compulsory insurance also to all labourers on farms of a value as shown in the cadastre of less than 6,000 crowns. In order to be able to draw correct conclusions and establish the frequency of the accidents, it would be necessary to know the number of the persons insured; but this information is not given us in the report.

In 1913 the accidents ascertained by the Council amounted to 116, of which 37 gave no right to compensation owing to the limited duration of their consequences, 5 resulted in death necessitating a total compensation of 12,500 crowns, while the rest were distributed in the following manner as regards the degree of disablement produced and the compensation paid.

10 % . . . . .	22	7,920 crowns
11-15 " . . . . .	22	11,124 "
16-20 " . . . . .	15	10,650 "
21-25 " . . . . .	5	4,500 "
26-50 " . . . . .	8	9,460 "
51-75 " . . . . .	2	5,040 "
76-90 " . . . . .	—	— "
100 " . . . . .	—	— "
	74	486,000 crowns

(2) *Age and sex of the victims. Time and causes of the accidents.*—

If the report of the Insurance Council fails to enlighten us on some points, it contains, on the other hand, an abundance of most interesting information regarding the age and sex of the victims, the time at which the accidents took place and the causes of the latter. We shall dwell with particular attention upon these data which furnish exceedingly important experience in regard to insurance, all the more because they are omitted in many other official and non-official statistical returns dealing with this subject.

TABLE II. — *Classification of Accidents According to the Age and Sex of the Persons Insured.*

	Compulsory Insurance												Voluntary Insurance			
	100 %						Total Number Disabled						Total Number Fatal			
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Under 10 years of age	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
From 10 to 14 years	12	2	8	1	4	—	—	—	—	—	—	—	—	—	—	—
» 15 » 19	18	2	10	2	9	—	—	—	—	—	—	—	—	—	—	—
» 20 » 29	33	5	32	2	10	—	—	—	—	—	—	—	—	—	—	—
» 30 » 39	20	5	23	2	11	—	—	—	—	—	—	—	—	—	—	—
» 40 » 49	16	2	16	5	8	—	—	—	—	—	—	—	—	—	—	—
» 50 » 59	25	6	21	7	13	—	—	—	—	—	—	—	—	—	—	—
» 60 » 64	13	2	7	1	1	—	—	—	—	—	—	—	—	—	—	—
» 65 » 69	5	3	4	—	4	—	—	—	—	—	—	—	—	—	—	—
» 70 » 74	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
» 75 » 79	3	1	1	1	1	—	—	—	—	—	—	—	—	—	—	—
80 and over	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	180	33	127	20	64	7	48	3	40	9	20	4	1	—	457	70
													8	55	40	25
													74	4	1	5

We have placed alongside of the data respecting compulsory insurance those relating to voluntary insurance, although the paucity of the latter allow of no positive conclusions being drawn from them; the sole noteworthy fact being that the percentage of accidents is larger for women in the case of voluntary insurance than in that of compulsory insurance. This fact is easily explained if we consider the kind of persons who are voluntarily insured (See page 37).

(3) *The causes of the accidents and the time of their occurrence.* With regard to the kind of work, we have the following data referring to compulsory insurance:

	Disabled	Killed
Rural Holdings of the value of 100,000 cr. and upwards . . . . .	87	10
"    "    "    "    50,000-100,000 " . . . . .	41	8
"    "    "    "    20,000-50,000 " . . . . .	183	20
"    "    "    "    12,000-20,000 " . . . . .	61	7
"    "    "    "    6,000-12,000 " . . . . .	46	2
Sericulture . . . . .	23	2
Horticulture . . . . .	15	—
Dairying . . . . .	22	1
Turf-cutting . . . . .	3	—
Threshing . . . . .	38	4
Working in Marl Pits . . . . .	6	—
"    in Accessory Industries . . . . .	8	1
	533	55

The fatal cases and those causing disablement occurring in the various quarters of the year are distributed as follows:

	Compulsory Insurance	Voluntary Insurance
1st. Quarter . . . . .	139	23
2nd. " . . . . .	108	11
3rd. " . . . . .	178	25
4th. " . . . . .	163	20

As is seen, the largest number of accidents occurred in the third quarter which includes July, August and September, a period of more intense agricultural work (reaping, threshing etc.).

The following is the distribution according to the days of the week:

	Compulsory Insurance			Voluntary Insurance
	Men	Women	Total	
Sunday . . . . .	56	6	62	9
Monday . . . . .	80	10	90	11
Tuesday . . . . .	68	16	84	13
Wednesday . . . . .	73	16	89	9
Thursday . . . . .	71	14	85	16
Friday . . . . .	77	12	89	12
Saturday . . . . .	74	9	83	13
Day not specified . . . . .	5	1	6	—
	504	84	288	79

Let us give in conclusion some data regarding the causes of the accidents:

	Compulsory Insurance	Voluntary Insurance
Accidents caused by animals . . . . .	94	17
„ „ „ driving . . . . .	91	13
„ „ „ machines and implements . . . . .	145	12
„ „ „ falls . . . . .	126	20
„ „ „ crushings, blows etc. . . . .	47	—
„ „ „ various causes . . . . .	85	17

(4). *Proportion of victims of accidents registered with Sickness Insurance Societies.*—Let us conclude with some brief notes on the proportion of the persons registered with Sickness Insurance Societies injured during the year 1910. As has been said before, the existing law does not grant compensation to injured persons until after an interval of 13 weeks. During that time compensation is paid by the Sickness Insurance Society authorised by the State, with which the labourer is registered. In 1913, of the 2,395 cases of accident (compulsory insurance) submitted to the decision of the Insurance Council, 2,043 had been registered with Sickness Insurance Societies. Naturally, cases were excluded in which the individual was less than 15 years old, as he cannot at that age belong to a sickness insurance society.

In the following comparative table, data for 1911, 1912 and 1913 are given.

TABLE III  
Number and Proportion of those Registered with Sickness Insurance Societies  
among the Persons Insured subject to Compulsory Insurance during the Years 1911, 1912 and 1913.

Age	1911				1912				1913			
	Total Figures		Percentage		Total Figures		Percentage		Total Figures		Percentage	
	Registered	Not Registered	Registered	Not Registered	Registered	Not Registered	Registered	Not Registered	Registered	Not Registered	Registered	Not Registered
15-19	177	313	36.1	63.9	247	310	44.3	55.7	247	283	46.6	53.4
20-24	151	105	43.6	56.4	152	177	46.2	53.8	173	177	49.4	50.6
25-29	103	113	47.7	52.3	96	96	50.0	50.0	99	102	49.3	50.7
30-34	73	77	48.7	51.3	71	59	54.6	45.4	101	49	67.3	32.7
35-39	68	51	57.1	42.9	107	53	66.9	33.1	83	44	65.4	34.6
40-44	73	20	73.7	26.3	85	35	70.8	29.2	81	33	71.1	28.9
45-49	75	51	59.5	40.5	69	60	63.3	36.7	59	53	52.7	47.3
50-54	50	63	44.2	55.8	52	60	46.4	53.6	56	41	56.0	44.0
55-59	59	70	45.7	54.3	52	49	51.5	48.5	52	63	45.2	54.8
60-64	48	51	48.5	51.5	34	56	37.8	62.2	35	62	36.1	63.9
65-69	26	39	40.0	60.0	25	35	41.7	58.3	27	35	43.5	56.5
70-74	13	25	34.2	65.8	13	37	34.2	65.8	17	37	31.5	68.5
75-79	2	10	16.7	83.3	4	13	23.5	76.5	3	17	15.0	85.0
80 and over	—	6	0.0	100.0	—	7	0.0	100.0	4	1	80.0	20.0
Age not specified	1	2	33.3	66.7	3	—	100.0	0.0	3	3	50.0	50.0
	919	1,092	45.7	54.3	1,010	1,015	49.9	50.1	1,040	1,003	50.9	49.1



The corresponding figures for voluntary insurance were, in 1913, 166 registered (62.1 %) as against 99 (37.9 %) not registered. In 1912, there were 66.4 % registered as against 33.6 % not registered, and in 1911, 57.8 % registered as against 42.2 % not registered.

The percentage of those registered with the sickness societies is thus higher in the case of voluntary than in that of compulsory insurance. Although the percentage of the compulsorily insured persons registered is slowly increasing, nevertheless it is to be deplored that nearly half of the victims of accidents, owing to improvidence, are without assistance during the first 13 weeks. If this has been proved to be the case in a country like Denmark, where the rural population has attained so high a degree of both intellectual and economic development, we must recognise the advisability of the direct intervention of the State, wherever possible, to oblige the improvident and careless to make provision for less prosperous times.

### § 3. INSURANCE AGAINST ACCIDENTS IN WORK DURING 1914.

We shall add to what has been said a table containing general data respecting insurance against accidents in labour recently published by the Labourers' Insurance Council.

	Accidents Reported	Accidents in the Case of which Right to Compensation is Acknowledged	Fatal Cases	Compensation for Injury — (crowns)	Compensation in Case of Death — (crowns)
Manufactures . . . . .	5,150	1,012	57	501,549	120,199.85
Fishing . . . . .	122	95	34	20,880	43,400.00
Navigation . . . . .	545	157	84	38,808	49,300.00
Agriculture . . . . .	2,465	9	77	348,444	74,800.00
Total . . . . .	6,570	2,397	269	957,345	303,109.85

These data show the large proportion of accidents in agricultural labour in the total number of accidents to labourers. Adding the figures for other years, we find that from 1908 to 1914, the total compensation paid for agricultural accidents, in the case of compulsory insurance alone, amounted to 2,267,556 crowns, of which, not taking into account the additional compensation granted during the years 1912-13, 370,400 crowns were paid as compensation in case of death, and 1,859,376 crowns in the case of disablement.

## MISCELLANEOUS NEWS.

5 — THE RECOGNISED SICKNESS INSURANCE SOCIETIES IN 1913 AND 1914. — Although as we have seen, the sickness insurance societies have not yet reached the maximum of development they may be expected to attain in a country like Denmark, they are yearly approaching nearer to this goal.

At the end of 1913, there were in Denmark, 1,547 authorised sickness insurance societies, as against 1,578 in the preceding year.

As it is not yet possible for us to give the data for 1914 relating to the distribution of these societies in Danish territory and to their composition, we shall give below the figures referring to the end of the preceding year:

TABLE I. — *Distribution of Sickness Insurance Societies in Denmark*

	Local Societies	Profess- ional Societies	Industrial Establish- ments/ Societies	Total
The Capital . . . . .	43	33	—	16
Provincial Towns . . . . .	127	23	10	160
Rural Communes of the Islands. . .	505	2	4	571
Rural Communes of Jutland . . .	712	—	2	741
The Faroe Islands . . . . .	7	—	—	7
Total for Denmark . . .	1,454	58	16	1,528

Although the table does not give special figures for agricultural societies, the importance of the sickness societies for the rural population is evident. In fact, out of 1,528 in 1913, 1,385 were local societies existing in the rural communes of the Kingdom. The same year, 98  $\frac{1}{2}$  %, or nearly all these communes, possessed sickness insurance societies. The numerical development of these societies has been continuous, regular and rapid since the passing of the law of April 12th., 1892, by which they were created, as is shown in the following table:

TABLE II. — *Percentage of Rural Communes Possessing Recognised Sickness Insurance Societies.*

		Islands %	Jutland %	Entire Kingdom %
Dec. 31st.,	1893	42	20	30
"	1894	47	27	35
"	1895	53	33	42
"	1896	58	43	40
"	1897	60	58	60
"	1898	64	68	69
"	1899	70	73	74
"	1900	75	78	77
"	1901	77	78	77
"	1902	80	81	81
"	1903	81	83	82
"	1904	86	86	86
"	1905	89	90	89
"	1906	91	92	91
"	1907	94	96	95
"	1908	98	97 $\frac{1}{2}$	96 $\frac{1}{2}$
"	1909	95 $\frac{1}{2}$	97 $\frac{1}{2}$	96 $\frac{1}{2}$
"	1910	96 $\frac{1}{2}$	98	97
"	1911	97	98	97 $\frac{1}{2}$
"	1912	97 $\frac{1}{2}$	98 $\frac{1}{2}$	98
"	1913	98	99	98 $\frac{1}{2}$

As regards the number of the members, it was higher in 1914 than had ever been before. We should notice that the report for 1913, show the same encouraging improvement as compared with the preceding year. In fact the number of members which was 749,635, in 1912, rose to 795,612 in 1913 and 834,448 in 1914. The increase was 39,006 members from 1912 to 1913, 45,812 from 1913 to 1914 and 47,809 in the course of the year 1914. The rural districts of Jutland and of the islands showed relative an increase of 7 and 5 per cent in comparison with the preceding year.

If the total number of members is compared with the total of the citizens of the Kingdom of above 15 years of age, it will be found that 44  $\frac{8}{9}$  of the latter belong to recognised sickness insurance societies. In 1908 the insured persons were only about  $\frac{1}{3}$ rd., in 1904  $\frac{1}{4}$ th., and in 1901  $\frac{1}{6}$ th. of the population.

The State grant to the recognised societies was increased in 1914 to 2,936,000 cr. or nearly 171,000 cr. more than in the preceding year.

(Summarised from the *Statistiske Efterretninger*, published by the Statistical Department, Copenhagen, March 31st., 1915, No. 7 and the Report of the Inspector of Sickness Insurance Societies for 1913. Copenhagen)

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2. -- SICKNESS INSURANCE OF FOREIGN RURAL WORKERS. -- Danish agriculture employs a fairly large number of foreign labourers. In the summer of 1914, there were in Denmark 12,452 foreign workers of whom 2,191 were men, 10,224 women and 37 children of an age for work; 11,851, or 96 per cent of the total, were employed in agricultural work. These of whom the number rose from 6,600 in 1907, to 12,700 in 1913, decreasing slightly in 1914) are for the most part Poles. In 1914, 9,332 came from Austrian Poland (Galicia), 2,938 from Russian Poland and 44 from German Poland. For the protection of these immigrants in a country of the language and customs of which the greater number were ignorant, a law, already mentioned by us, was passed in 1908 (amended in 1912), under the name of "Polaklonen". This law especially regulated the contracts and the conditions of the housing of the immigrants, but contained in addition important provisions of social thrift, such as those relating to sickness insurance societies. According to art. 8 (law of April 17th., 1912), second and following paragraphs, "every contractor employing workers coming under the head of those mentioned in Art. 1 of the present law, is required to enter these foreign workers on the books of the mutual aid society "Sygeforsikring for udelandske Landarbejdere" (Sickness Insurance Society for Foreign Agricultural Labourers) recognised for the purpose by the Department of the Interior as a sickness insurance society. The State allows to this society, a grant of 50 öre per insured labourer and  $\frac{1}{10}$ th. of the total of the aid up contributions, up to the amount of one crown per annum per labourer insured.

"In the contract mentioned, in art. 4, it shall be expressly specified that foreign labourers shall be insured against the consequences of diseases. This insurance includes such burial charges as may not be covered by the sums still due on wages, and the deposit for the return journey. The insurance further covers the consequences of accidents in accordance with the laws relating to accidents in work ....."

During the year from March 1st., 1913 to February 28th., 1914, 2,044 employers had insured 13,074 labourers. The society's receipts during the same period rose to 74,811 cr., of which 31,688 cr. consisted of the balance from the preceding year. Of the total expenses, 28,901 cr. represented hospital expenses, 3,545 cr. the doctor's fees, 335 cr. the cost of medicine and 1,110 crs. daily compensation. During the above-mentioned year, 952 cases of sickness were notified; the days of sickness were 15,099, or about 16 days per labourer invalided and 1.56 per labourer insured.

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3. -- HAIL INSURANCE. --- There are in Denmark 15 mutual hail insurance societies. Of these 5 have their head quarters in the islands and

10 in Jutland. The societies had a total of 81,000 members; 43,000 of these belonged to island societies which, on an average, are considerably more important than those of Jutland (8,600 as against 3,800 members per society).

The total amount insured in 1913 was 195,000,000 cr., 99.8 per cent this amount being insured in the insular societies and 95.2 % in the society of Jutland. The compensation paid varied much from year to year, is shown by the following figures :

	Total of Premiums and Other Receipts —	Compensation Paid —	Capital of the Societies —
1908 . . . . .	406,000	369,000	—
1909 . . . . .	260,000	223,000	—
1910 . . . . .	120,000	78,000	350,000
1911 . . . . .	129,000	78,000	354,000
1912 . . . . .	289,000	214,000	312,000
1913 . . . . .	300,000	291,000	326,000

There are no precise data as to the area insured against damage by hail. It can be approximately estimated at about  $\frac{1}{3}$ rd. of the count and at one half of the land capable of cultivation.

(Summarised from *Statistisk Efterbægt*, February 18th., 1915.)

## Part III: Credit

### ITALY.

#### INTEREST BEARING MORTGAGES IN ITALY AT THE END OF 1910.

By Dr. DOMENICO POLIZIO,

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#### INTRODUCTION.

The utility of a report on the mortgage indebtedness as indicative of the conditions of landed property and the development of credit in one of the forms of widest and securest application cannot be overlooked.

If we may admit that today the interest in knowing what part of the mortgage indebtedness is borne by holdings not yet relieved of servitudes of ancient origin is becoming less, attention is on the other hand being given more and more to that portion, which is now the most important and is continually increasing, that is to debts on loans incurred for the benefit of agricultural or urban holdings, or in connection with the purchase of real estate by instalments, as this part is directly connected with the increase of production and prosperity.

To examine from this point of view the mass of savings spontaneously directed towards landed property as an investment presenting a certain stability and the rate of interest on such investments, the term for which the debts are incurred, the share the principal classes of lenders and borrowers are in them, to investigate as far as may be the object of the investment, the nature of the real estate benefiting by the capital borrowed, as well as the distribution of the objects of these enquiries in the various

parts of the national territory, without doubt is a task for economic statistics to undertake of quite novel and increasing interest.

When further, thanks to these studies, it has become possible to establish the sphere of action of the banking institutes authorised to conduct land credit business, with special financial privileges and privileges in respect to procedure granted them by law, we should have the means of practically testing the sufficiency of the eventual imperfections of the measures to prevent loans at exorbitant interest, and at the same time to facilitate the production of wealth.

Statistical research in this direction is not yet sufficiently advanced and has not been very often undertaken.

France, where the methodical organization of this research was earliest studied (1), has not yet begun the research itself.

In fact, the earliest very limited researches, carried out on the initiative of the International Institute of Statistics, were made several years ago (2) and have not been followed up.

The Hungarian Government has recently commenced the study, but on a system that has been very much attacked (3). We know also that the Egyptian Government is, in its turn, beginning to occupy itself with this matter.

The most extensive and most reliable results have been obtained by the Italian Department of Finance. Its first studies were made at the end of 1903 and extended over the thirty years' period from 1874 to 1903, and in accordance with the Italian Civil Code, mortgages expire at the end of thirty years; the second studies which have just been published cover the period 1881-1910 (4). In both cases only the certain interest bearing mortgage indebtedness was considered and the eventual mortgages not paying interest were neglected, as they are generally subject to suspensive conditions or are means of precaution, but, in reality, do not affect the value of the holding, and do not constitute an investment of capital.

We shall briefly examine the recent statistical return for the period up to the end of 1910, in its principal aspects and its signification.

#### METHOD AND RESULTS.

In the first place the studies made in Italy have the merit of being reliable. If, in fact, in other countries it is easy to ascertain the amount of mortgage indebtedness from the public registers of mortgages, and ascert

(1) *Bulletin du Conseil Supérieur de Statistique*, 1897, No. 6.

(2) *Bulletin de l'Institut International de Statistique*, Vols. XI, XIII and XIV.

(3) FELLNER: *La dette hypothécaire et les charges publiques des immeubles en Hongrie*. Do. Vol. XVIII.

(4) Department of Finance: *Statistica del debito ipotecario istruttivo italiano e dell'evoluzione degli Istituti di credito fondiario al 31 dicembre 1910*.

in their principal details, as their registration is compulsory, it is not very where as easy, as in Italy, to separate the certain from the eventual indebtedness, and, in regard to the first, to make careful, additional examination in regard to partial or total repayments not entered on the mortgage registers, either out of carelessness or to save expense, or on other grounds, well as in the case of other changes not registered or duplicate entries.

This examination, which is indispensable if reliable results are to be obtained, on the other hand, is possible in Italy, owing to the special arrangements for the income tax affecting the certain interest bearing credits individually, in respect to all modifications up to the total repayment, whether made in regard to the rate of interest, the term or the substitution of the debtor or the creditor. As it is to the interest of the taxpayer at once to report duplicate entries and variations (the term for prescription being very short and the tax very heavy, 15% of the gross revenue besides the additional centimes and the costs of collection), we may be certain that generally the alterations and duplicate entries are reported by the taxpayer to the taxing officer, even if not registered in the mortgage office.

The system being such, it is sufficient for the purposes of an accurate return that each mortgage credit in the thirty years' period to be studied is entered on a card afterwards forwarded to the taxing officer for identification and examination, so that he may make declaration whether at a date established in advance, the credit is still entire or modified in any detail, whether there are duplicate cards for the same credit, and, if that be the case, which of them must be destroyed.

The examination is then so complete that if the mortgage were fraudulently registered as not bearing interest, or if by chance it were omitted by the registrar from his report, the taxing officer would be able to show the credit that should appear in the return, unless the registrar, in his turn, could prove that none had to be shown, for example if the mortgage took effect from a later date than that fixed for the return of mortgages, or if there were only a note of hand.

It is only in the cases in which the Italian income tax regulations do not oblige, for special reasons, certain institutions (the State, provinces, communes, the Public Worship Fund, institutions in the enjoyment of civil personality, land credit establishments, banks and societies limited by shares) to establish the amount and the conditions of each of the credits bearing interest, that it is necessary to ask for the benevolent co-operation of these institutions, as it is not possible to find the necessary information in their statements of accounts. To say the truth, this special assistance is generously given, especially by the land credit establishments which are once interested themselves in the social object of this statistical return.

The same course was pursued in respect to the few cases of mutual societies exempted from income tax. Finally, when there was exemption for life annuities on account of their insignificant amounts, or for landlords' servitudes due to private individuals, as the voluntary co-oper-



ation of those enjoying them was *a priori* not to be expected, the information in the mortgage registers had to suffice.

This method, elaborated by the Department for its first statistical enquiry for the period ending December 31st., 1903, having given good results, was again applied in the second enquiry for the period ending December 31st., 1910.

The preface to this return furnishes information on this matter as well as in regard to the necessary unity of aim in the preparation and examination of the information in its first form, and the examination of each card and the later grouping of the data in synthetical tables.

The Italian Government proposed in the first place to examine the effects of two new influences favouring public economy, between 1903 and 1910, the reduction of the rate of interest and emigration, very justly observing that "In view of the general reduction of the rate of interest on loan a new situation was formed so favourable to the debtors that it enabled the State to reduce the legal rate of interest by 1 % by the law of June 22nd., 1905. Further, other enquiries had revealed that the large amount of money constantly sent to Italy by emigrants who had gone abroad in search of labour were to a large extent utilised, especially in certain regions for the repayment of debts and the purchase of real estate and for clearing the burdens upon it. The new enquiry in regard to mortgage indebtedness was undertaken for the purpose of discovering whether the mortgage real estate had benefited by an improvement corresponding with the burden of the conventional or judicial interest, as well as the importance of the improvement, the amount of the new savings utilised on mortgage security for purposes of building or of agriculture and the amount of the business done by the land credit institutes. The new enquiry must finally furnish information that may be of use in case the studies for the conversion of the mortgage debt into land debt are resumed."

The investigations conducted on these lines have shown that the number of the interest bearing credits entered on special cards was 1,160,206 from which number there must be deducted, as a result of the examination above mentioned: 1st., 335,782 fully paid off; 2nd. 7,992 duplicate entries; 3rd., 7,822 entries erroneously made either by the registrar of mortgages or the taxing officer.

There thus remained, altogether or in part, at the end of 1910, 608,616 first mortgages for a total amount of 4,253,904,130 frs.

Our attention is immediately attracted by the very large number of credits fully repaid, the amount of which we do not know, because probably no importance was given to what may be considered as the withered portion of the vigorous plant, the green and living part claiming every attention. However, it is ascertained that in all the regions of Italy the number of mortgages very appreciably decreased between the end of 1903 and that of 1910. We seem, therefore, to be authorised in inferring that, during this period, there has been a general effort made to extinguish the ancient burdens on real estate and that this effort was intense at least in the regions from which there was the largest emigration overseas.

The following table shows the distribution of the mortgage indebted-  
ness at the end of 1910, according to the regions as well as the percentages  
for the regions considered.

TABLE I. — *Territorial Distribution of the Italian Mortgage Indebtedness.*

	Number of Entries	Amount	Percentage	
			of Number	of Amount
Piedmont . . . . .	73,432	354,730,468	9.09	8.34
Liguria . . . . .	26,886	189,051,832	3.33	4.45
Lombardy . . . . .	67,830	818,281,412	8.38	19.24
Veneto . . . . .	65,879	366,092,001	8.15	8.60
<b>NORTH ITALY . . .</b>	<b>234,127</b>	<b>1,728,155,713</b>	<b>28.95</b>	<b>40.63</b>
Emilia and Romagna . . . . .	46,048	358,822,926	5.69	8.44
Tuscany . . . . .	90,335	469,798,827	11.18	11.05
Marche . . . . .	24,297	109,288,187	3.00	2.57
Umbria . . . . .	17,413	92,385,639	2.15	2.17
Latium . . . . .	31,599	344,363,444	3.91	8.09
<b>CENTRAL ITALY . . .</b>	<b>209,692</b>	<b>1,374,659,053</b>	<b>25.93</b>	<b>32.35</b>
Abbruzzi and Molise . . . . .	41,545	80,747,883	5.13	1.89
Campania . . . . .	86,765	355,342,546	10.95	8.35
Apulia . . . . .	84,694	215,973,606	10.41	5.08
Basilicata . . . . .	23,721	39,116,870	2.84	0.92
Calabria . . . . .	23,026	84,661,453	2.80	1.99
<b>SOUTH ITALY . . .</b>	<b>259,751</b>	<b>775,842,358</b>	<b>32.13</b>	<b>18.53</b>
Sicily . . . . .	87,893	343,967,917	10.89	8.09
Sardinia . . . . .	17,207	31,279,089	2.10	0.73
<b>INSULAR ITALY . . .</b>	<b>105,100</b>	<b>375,247,006</b>	<b>12.99</b>	<b>8.82</b>
<b>ITALY . . .</b>	<b>808,670</b>	<b>4,253,904,130</b>	<b>100</b>	<b>100</b>

The rates of interest per annum are divided into five classes :

Up to	3 $\frac{1}{2}$ %		
Between	3 $\frac{1}{2}$ %	and	5 %
"	5 %	"	8 %
"	8 %	"	10 %
Above	10 %		

The first class probably includes the rates we may consider most in favour up to the present on account of their being so moderate, the second class may be considered as including the ordinary rates of honourable trade; the third may already be considered as including high rates; the fourth and fifth include ruinous and usurious rates of interest exceptionally asked in the case of life annuities and servitudes of ancient origin in regard to which a plausible reason may be established by contract or which may be justified on historical grounds as the burden is no longer borne by the real possessor or purchaser of the land.

It would have been certainly advisable to establish a more minute distinction in the group of rates between 3  $\frac{1}{2}$  % and 5 %, as that paid on about three fourths of the mortgages, were it only to facilitate comparison, for, in short periods of time, the variations in the rate of interest are generally slight and are lost sight of in a too heterogeneous mass. We think the Department itself is now convinced of the advisability of taking this into consideration when a new return of mortgages is prepared.

Under existing conditions, the mortgage credits and their amounts are classified as under, in respect to the annual rate of interest.

TABLE II. — *Rates of Interest per Annum.*

Interest Bearing Mortgages	Number	Amount	Percentage	
			of Number	of Amount
Up to 3 $\frac{1}{2}$ % . . . . .	33,774	470,942,203	4.18	11.97
Between 3 $\frac{1}{2}$ and 5 % . . . . .	527,591	3,084,591,030	65.24	72.52
" 5 " 8 % . . . . .	211,584	621,537,258	26.15	14.61
" 8 " 10 % . . . . .	30,663	65,063,625	3.79	1.53
Above 10 % . . . . .	5,148	11,770,014	0.64	0.27
<b>TOTAL . . . . .</b>	<b>808,670</b>	<b>4,253,904,130</b>	<b>100 —</b>	<b>100 —</b>

The great mass of these mortgages originate, as we have already said, in loans which may be distributed as follows, according to the rate of interest :

TABLE III. --- *Rate of Annual Interest on Loans.*

Loans	Number	Amount in Frs.	Percentage	
			of Number	of Amount
Up to $3\frac{1}{2}\%$ . . . . .	17,787	417,921,635	4.60	12.56
Between $3\frac{1}{2}\%$ and $5\%$ . . . . .	216,506	2,382,016,140	55.95	71.62
" 5      " 8 " . . . . .	131,872	492,289,931	34.97	14.80
" 8      " 10 " . . . . .	18,522	30,346,907	4.79	0.91
Above $10\%$ . . . . .	2,295	3,712,370	0.59	0.11
<b>TOTAL . . . . .</b>	<b>386,982</b>	<b>3,326,286,983</b>	<b>100 —</b>	<b>100 —</b>

This comparison shows that the greater part of the money lent brings in only a low or the usual rate of interest (a consequence, as we shall soon see, of the action of the land credit institute), but it also shows that a considerable portion is lent at rates above five per cent and even at usurious rates.

The information in fact obtained from the 808,670 cards relating to credits in course is shown in seven detailed tables, the selection and arrangement of which bring into relief the essential elements of the mortgages according to the civil law of Italy as well as some other economic and demographic statistics it was considered desirable to ascertain. More precisely

The first table shows the mortgage credits according to their amount distinguishing those not exceeding 1,000 francs (very small credits), those between 1,000 frs. and 10,000 frs. (small credits), those between 10,000 and 50,000 frs. (average credits) and, finally, those for more than 50,000 francs. Since generally and above all in the case of loans, the amount of credit is in direct relation to the value of the holdings, it may be admitted within reasonable limits, that the distinction constitutes a reliable indication of the economic importance of the encumbered holdings, that is, respectively of the very small, the small, the average sized and the large landed property encumbered.

The second table is concerned with the creditors and distinguishes 1st., the State, which is a large creditor in regard to annual dues devolving on it as possessor of the ancient domains of the former States of Italy 2nd., the provinces and communes; the latter are for the most part creditor in respect to annual dues devolving on them through their shares of the communal domains; 3rd., the Public Worship Fund, a State Department a large creditor in respect to annual dues devolving on it through the suppression of ecclesiastical property; 4th., the land credit institutes, which make the largest loans; 5th., other organizations and societies including savings banks and other banks; 6th., private individuals.

The third table is concerned with the debtors, and distinguishes; 1st., the State; 2nd., the provinces and communes; 3rd., the Public Worship Fund; 4th., Institutes of every kind, including those of co-operative character, for house building purposes, as a special return of these institutes recently formed and developing with the help of credit seemed desirable; 5th., the other incorporated bodies and societies; 6th., private individuals.

The fourth table is concerned with the causes of the debt, which are grouped as follows: purchase price of land still unpaid; annual dues of every kind and life annuities; loans; other causes. The latter include mortgages in connection with any other obligation not specified in the other groups, and most of the judicial mortgages.

The fifth table is concerned with the term of the mortgage loans, in relation to the rate of interest. The terms were classified as five years, ten years, twenty years, more than twenty years, or periods undefined. If the period registered were exceeded, the fact was reported, as it is reasonable to be presumed that it was by agreement.

The sixth table is specially concerned with the operations of the land credit institutes, showing the amount, and the nature of the holdings offered in security of the loan.

The seventh table shows the distribution of the mortgage debt in the communes of the Kingdom, according to the population as ascertained at the last census. Account is taken of the nature of the mortgage, that is whether legal, conventional or judicial, and of the class of property engaged, that is whether land, buildings or both. The communes were divided into four groups, with population of not more than 5,000 inhabitants (very small rural communes), between 5,000 and 20,000 inhabitants (small communes), between 20,000 and 100,000 inhabitants (communes of average size) or over 100,000 inhabitants (large urban centres) and these classes are preceded by another including mortgages for indefinite amounts on land situated in more than one commune irrespective of the population. The amounts obtained by capitalisation of the annual income and life annuities have been kept separate.

In every table and in each class the number and amount of mortgages were shown, and, where possible, have also been grouped according to the rate of interest per annum.

The reports were made first, for the mortgage registry offices, of which there are 129 in Italy; then, for the provinces, the regions and the entire Kingdom.

For the easier understanding of the tables and their verification, there is prefixed a table in which the results are summarised for each of the sixteen regions of Italy, for each of the large divisions, North, Central, South and Insular Italy, and for the whole Kingdom.

We reproduce the summary here:

TABLE IV. — *Statistics of Interest Bearing Mortgages*

Mortgages	Not Exceeding 3 1/2 %		Between 3 1/2 % and 4 %	
	Number of Mortgages	Amount	Number of Mortgages	Amount
<i>Amount of the Mortgages.</i>				
Up to 1,000 frs. . . . .	16,089	6,266,397	292,255	10
Between 1,001 frs. and 10,000 frs. . . . .	11,855	44,278,387	184,224	67
" 10,001 " " 50,000 " . . . . .	4,059	97,433,950	42,175	93
50,001 frs. and more . . . . .	1,771	322,963,469	8,847	1,37
Total . . . . .	33,774	410,942,203	527,501	3,08
<i>Creditors.</i>				
The State. . . . .	1,159	5,302,285	11,243	1
Provinces and Communes. . . . .	4,027	3,636,010	23,322	2
Public Worship Fund . . . . .	563	606,876	28,056	1
Land Credit Institutes. . . . .	8,364	331,566,714	20,323	65
Other Credit Institutes, Societies and Incorporated Bodies . . . . .	8,547	25,460,791	159,970	70
Private Individuals . . . . .	11,114	104,279,527	293,587	1,66
Total . . . . .	33,774	410,942,203	527,501	3,08
<i>Debtors.</i>				
The State. . . . .	4	15,181	43	
Provinces and Communes. . . . .	127	3,073,036	1,258	4
Public Worship Fund . . . . .	1	294	1	
Building Institutes and Co-operative Societies . . . . .	111	46,522,736	268	3
Other Societies and Incorporated Bodies . . . . .	348	15,062,297	2,498	21
Private Individuals . . . . .	33,183	406,218,659	523,433	2,77
Total . . . . .	33,774	410,942,203	527,501	3,08
<i>Origin of the Mortgage.</i>				
Purchase Price Still Unpaid . . . . .	1,694	13,775,571	23,926	17
Annual Income and Life Annuities . . . . .	12,225	16,167,628	226,324	31
Loans . . . . .	17,787	417,921,635	216,506	2,38
Other Causes . . . . .	2,068	20,077,369	60,745	19
Total . . . . .	33,774	410,942,203	527,501	3,08
<i>Term of Loans on Mortgage.</i>				
Less than 5 years . . . . .	2,545	27,196,283	46,794	40
" 5 to 10 " . . . . .	2,149	25,554,562	16,723	50
" 10 to 20 " . . . . .	3,435	77,519,198	52,179	11
More than 20 years or for Unspecified Time. . . . .	9,658	287,652,092	70,810	46
Total . . . . .	17,787	417,921,635	216,506	2,38
<i>Operations of Land Credit Institutes.</i>				
Loans up to 1,000 frs. . . . .				
" between 1,001 " and 10,000 frs. . . . .				
" 10,001 " " 50,000 " . . . . .				
for 50,001 and more . . . . .				

Tot

# INTEREST BEARING MORTGAGES

57

under 31st, 1910 (Kingdom of Italy).

Under 3%	3% and 8%	Between 8% and 10%		Above 10%		Total	
		Amount	Number of Mortgages	Amount	Number of Mortgages	Amount	Number of Mortgages
44	52,417,298	17,970	9,099,085	3,173	1,502,237	442,331	172,628,974
45	288,825,690	11,851	34,354,147	1,803	5,299,012	298,302	1,044,630,477
46	186,560,543	780	15,012,893	154	3,091,171	56,451	1,239,012,527
47	93,733,718	62	6,596,000	18	1,877,594	11,586	1,797,632,152
48	121,537,258	30,663	65,063,625	5,148	11,710,014	808,670	4,353,904,130
49	8,872,399	12	8,262	14	2,424	18,210	28,609,330
50	1,027,086	193	42,568	131	70,467	29,518	30,932,617
51	2,805,492	141	57,578	29	37,253	35,014	22,199,788
52	113,697	"	"	"	"	28,698	987,800,774
53	128,515,074	1,657	1,691,646	717	1,017,860	207,673	860,087,706
54	479,543,510	28,660	63,263,571	4,457	10,642,010	489,557	2,325,113,906
55	121,537,258	30,663	65,063,625	5,148	11,710,014	808,670	4,353,904,130
56	2,159	"	"	"	"	50	1,170,393
57	2,133,034	4	37,590	1	2,342	1,542	46,415,838
58	"	"	"	"	"	2	2,784
59	420,658	"	"	"	"	387	81,075,281
60	4,210,019	44	168,145	10	87,131	3,363	288,126,138
61	614,771,388	30,615	64,857,890	5,137	11,680,341	803,326	3,836,513,696
62	121,537,258	30,663	65,063,625	5,148	11,710,014	808,670	4,353,904,130
63	25,811,261	248	335,537	29	42,259	38,806	218,782,014
64	29,730,524	9,905	30,561,592	2,517	7,464,916	286,379	415,262,104
65	492,289,931	18,522	30,346,907	2,295	3,712,370	386,982	3,326,286,983
66	73,695,542	1,928	3,819,589	307	550,469	96,303	293,572,420
67	121,537,258	30,663	65,063,625	5,148	11,710,014	808,670	4,353,904,130
68	96,354,203	2,533	4,094,861	214	427,709	77,030	533,245,517
69	96,136,497	2,428	4,392,905	224	207,717	77,281	695,561,179
70	117,933,097	5,355	8,317,343	590	736,717	98,270	649,118,723
71	179,866,134	8,206	13,512,698	1,267	2,250,227	134,491	1,448,361,504
72	492,289,931	18,522	30,346,907	2,295	3,712,370	386,982	3,326,286,983
sourced on							
Land		Buildings		Both Land and Buildings		Total	
73	184,043	4,019	1,643,485	513	285,150	4,858	2,112,678
74	13,414,768	3,603	16,485,776	3,630	19,639,839	9,955	49,540,383
75	30,777,697	3,092	77,274,048	4,012	98,617,993	9,361	226,669,738
76	118,977,031	1,698	267,002,003	2,039	324,458,941	4,524	799,537,975
77	182,453,639	12,472	862,405,312	10,194	443,001,923	28,698	987,860,771



TABLE IV. (Continued). — Statistics of Interest

Mortgages		Land			Kind
		Number of Mortgages	Amount of		
			Annual Income	Capital Invested	
Property Mortgaged and Nature of Mortgages					
Mortgages Registered in more than one Commune	on Security of Capital	Legal . . . . .	445	"	3,356,820
		Conventional . . . . .	6,012	"	98,966,676
		Judicial . . . . .	1,835	"	7,954,857
	on Security of Annual Income and Life Annuities	Conventional . . . . .	2,329	627,306	12,112,176
		Judicial . . . . .	143	41,994	804,391
		Total . . . . .	10,764	669,310	123,194,939
with Population up to 5,000 Inhabit- ants	on Security of Capital	Legal . . . . .	11,612	"	21,689,637
		Conventional . . . . .	59,297	"	201,823,399
		Judicial . . . . .	14,364	"	18,804,333
	on Security of Annual Income and Life Annuities	Conventional . . . . .	76,524	3,318,858	62,317,005
		Judicial . . . . .	9,971	297,055	5,848,943
		Total . . . . .	171,768	3,615,913	309,883,321
with Population of Between 5,000 and 20,000 Inhabit- ants	on Security of Capital	Legal . . . . .	6,626	"	19,851,339
		Conventional . . . . .	37,493	"	187,456,066
		Judicial . . . . .	8,451	"	16,609,334
	on Security of Annual Income and Life Annuities	Conventional . . . . .	68,477	3,399,853	66,427,787
		Judicial . . . . .	2,285	121,697	2,306,364
		Total . . . . .	123,332	3,521,550	295,111,313
with Population of Between 20,000 and 100,000 Inhabit- ants	on Security of Capital	Legal . . . . .	3,164	"	9,879,660
		Conventional . . . . .	16,760	"	95,536,301
		Judicial . . . . .	3,074	"	7,374,219
	on Security of Annual Income and Life Annuities	Conventional . . . . .	23,609	2,859,302	35,072,087
		Judicial . . . . .	430	61,217	1,051,461
		Total . . . . .	47,632	1,920,519	148,931,637
with Population of more than 100,000 Inhabit- ants	on Security of Capital	Legal . . . . .	931	"	16,609,480
		Conventional . . . . .	2,878	"	60,875,735
		Judicial . . . . .	496	"	2,905,347
	on Security of Annual Income and Life Annuities	Conventional . . . . .	2,897	714,957	11,944,673
		Judicial . . . . .	59	11,126	190,614
		Total . . . . .	7,761	126,083	93,329,819
Total . . . . .	on Security of Capital	Legal . . . . .	22,778	"	70,786,865
		Conventional . . . . .	122,440	"	641,681,382
		Judicial . . . . .	28,220	"	53,649,330
	on Security of Annual Income and Life Annuities	Conventional . . . . .	173,836	9,911,276	187,873,728
		Judicial . . . . .	12,888	532,999	10,261,975
Total . . . . .		880,162	10,444,275	967,250,500	

Mortgages Registered in one Commune only.

# INTEREST BEARING MORTGAGES

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up to December 31st., 1910 (Kingdom of Italy).

Days	Amount of Capital Invested	Land and Buildings Together			Total		
		Number of Mortgages	Annual Income	Amount of Capital Invested	Number of Mortgages	Annual Income	Amount of Capital Invested
	448,989	532	"	10,446,005	1,020	"	14,251,823
	28,757,441	16,506	"	403,373,744	23,509	"	591,001,861
	957,734	8,437	"	44,442,450	10,363	"	53,355,941
115	1,029,391	2,117	1,178,284	21,269,496	4,684	1,863,705	34,411,063
148	167,975	161	91,424	1,086,100	316	145,476	2,658,466
153	<b>31,355,530</b>	<b>21,153</b>	<b>1,269,708</b>	<b>541,317,195</b>	<b>40,101</b>	<b>2,009,181</b>	<b>695,168,734</b>
	4,613,742	3,585	"	26,189,793	17,131	"	51,913,172
	69,612,353	72,474	"	469,597,616	158,789	"	749,943,368
	4,130,504	22,854	"	34,093,752	43,197	"	57,828,609
192	8,993,493	14,324	1,954,117	33,479,368	108,471	5,789,967	104,780,891
75	535,155	556	91,009	2,634,921	10,925	425,899	8,019,009
117	<b>88,705,247</b>	<b>113,193</b>	<b>2,045,186</b>	<b>564,896,465</b>	<b>338,813</b>	<b>6,315,866</b>	<b>963,485,049</b>
	8,162,163	2,036	"	18,849,895	11,381	"	46,863,397
	104,673,144	41,869	"	408,991,250	109,062	"	701,120,469
	7,752,331	12,568	"	30,834,267	27,077	"	55,106,152
139	17,679,277	12,607	1,815,854	33,367,339	104,721	6,188,846	117,474,423
106	379,906	317	73,857	1,429,719	2,942	218,760	4,166,589
145	<b>138,631,821</b>	<b>69,487</b>	<b>1,889,711</b>	<b>493,471,896</b>	<b>255,186</b>	<b>6,407,606</b>	<b>924,821,030</b>
	9,566,130	1,025	"	8,982,381	6,443	"	28,428,111
	162,271,763	18,919	"	212,149,928	60,721	"	469,978,194
	6,921,461	5,249	"	17,006,100	11,884	"	31,900,080
006	24,494,478	7,251	1,371,533	26,126,095	44,055	4,421,811	82,662,666
72	475,919	138	62,268	1,168,311	697	151,148	2,665,693
129	<b>500,129,251</b>	<b>32,582</b>	<b>1,433,741</b>	<b>266,932,115</b>	<b>123,110</b>	<b>4,572,989</b>	<b>615,694,738</b>
	49,312,843	420	"	11,003,200	2,772	"	79,925,613
	631,499,906	6,603	"	188,792,163	34,386	"	901,170,834
	13,908,820	1,122	"	6,860,935	3,994	"	23,975,302
870	36,306,882	1,216	493,898	8,100,068	9,447	3,326,734	56,420,623
947	1,201,412	67	32,149	460,061	291	118,319	1,942,687
916	<b>743,319,893</b>	<b>9,428</b>	<b>536,044</b>	<b>218,286,111</b>	<b>50,860</b>	<b>3,445,053</b>	<b>1,054,135,029</b>
	63,123,867	7,508	"	78,471,364	38,939	"	212,382,116
	1,016,608,637	151,371	"	1,742,811,707	386,167	"	3,494,394,726
	34,470,850	50,230	"	133,837,804	96,085	"	221,955,184
131	85,503,521	37,005	6,813,686	122,402,411	271,408	21,591,093	395,779,660
899	2,841,367	1,239	350,794	6,379,102	15,171	1,059,602	19,482,444
000	<b>1,202,748,212</b>	<b>258,049</b>	<b>7,164,390</b>	<b>2,083,905,388</b>	<b>808,670</b>	<b>22,650,695</b>	<b>4,253,904,130</b>

## § 1. THE AMOUNT OF THE MORTGAGES.

Therefore, in Italy there is a prevalence of small and very small credits, constituting about 92 % of the number, while their amount is almost 30 % of the total amount.

Both absolutely and relatively most of the interest at high rates is paid on them.

This suffices, we think to show how little small holdings benefit by credit and the difficulties they generally encounter in obtaining it, even when giving real security. The interest on a fair proportion of these credits is indeed, low, and does not exceed 3  $\frac{1}{2}$  % and on a larger proportion interest is paid at the usual rate, from 3  $\frac{1}{2}$  % to 5 %; but, still, there remains a large proportion on which the interest is high, that is about a third part of the amount of these small credits, met with most frequently in South Italy and the islands.

The credits of average amount constitute 7 % of the total number and their amount is about 30 % of the total amount. Even in the case of these it is no rare thing to find that the interest is high, in excess of 5 %, although the proportion paying these high rates is not so large as in the case of small credits, being 17 % of the total. In this case also we find the situation is worst in Southern and Insular Italy.

The large mortgages represent, respectively about 1 % of the number and a little more than 40 % of the total value of the mortgages of the country. The interest on these is for the most part very low or of average amount. In fact, out of 1,797,000,000 frs., quite 1,604,000,000 frs., or more than  $\frac{89}{100}$  pay interest not exceeding 5 % and represent the greater part of the capital invested at low interest. From these points of view, the situation in North and Central Italy is best.

In the interval between 1903 and 1910 we may note a general tendency towards a reduction of the number of mortgages, that is from 410,604 to 808,670 with an increase in their value from 3,666,230,620 francs to 4,253,904,130 francs, or a decrease of 108,024 in the number and an increase of 587,673,510 frs. in their amount. The average amount of the interest bearing mortgage has, therefore, risen, in this period, from 3,998 frs. to 5,260 frs.

To the decrease in number all the regions of Italy contribute, but only North and Central Italy contribute to the increase in value, and, in the first place, Lombardy, while South Italy and the islands show a tendency partially to extinguish their mortgage debt, except that in Abruzzi the number of the mortgages has indeed been considerably reduced, but the amount has increased.

Here we see, generally, evident indications of economic progress, however the results are regarded. In fact, it is undeniable that there has been the greatest economic progress in recent times precisely in North and

Central Italy and especially in Lombardy: it must, therefore, be admitted that most of the mortgages, favoured by the reduced rate of interest, have, in these districts, generally served the purposes of production. The decrease in the debt, on the other hand, in the South and in the islands, can only be ascribed to a special cause. Another extensive enquiry of these days (1) had already shown it: it is the remittance of large amounts of money to those countries, by the emigrants, for the purpose of the extinction of mortgages on their own holdings, or on holdings purchased by them, or increasing the available local savings, which facilitate the substitution of loans on notes of hand for the older and more expensive mortgages.

The exception noted in the case of the Abruzzi is more apparent than real, since there, where indeed the number of the mortgages has decreased by one fifth, the debt has increased principally in places (especially in the Province of Aquila) where, in recent years, a slow but industrious economic transformation has been in course, that must have rendered necessary also a larger amount of real security.

## § 2. MORTGAGEES.

The majority of the mortgagees, that is sixty per cent of them, are private individuals. The greater part, 55 %, of the capital lent on mortgage is theirs. They receive the highest interest. It may be affirmed that in Italy they are the only usurers.

Incorporated bodies, banks and societies possess about one fourth of the credits, representing one fifth of the total amount. This is an important group, which it would be certainly very advisable to divide into two portions, respectively for the banking institutes and the other incorporated bodies, since the work of the former is most important and is quite different, their investments being loans of considerable amount at low interest,\* while the other organizations are creditors to a smaller extent, often receiving high interest, because they are essentially creditors for annual dues, thus capitalized. The Department of Finance affirms that it was its intention to distinguish the credit institutes from the other incorporated bodies, but it had unfortunately to abandon the idea in view of the difficulties in the way of an accurate identification.

It may be that it is not easy to say if a charitable institution or a commercial society, which is a mortgage creditor even for loans on mortgage, may or may not be considered as a credit institute, but the distinction would seem to be clear at least in the case of some special organizations, like the Savings Banks, the Monti and those other institutes indicated as commercial banks in their title. It is, therefore, to be desired that, when another

(1) Inchiesta parlamentare sulle condizioni dei contadini nelle province meridionali e nella Sicilia. Rome, 1910-11.

statistical return is prepared, at least these latter organizations may be kept distinct, as they are among the largest creditors and are numerous in many regions.

The most important amounts belonging to this class of creditors are invested in Central Italy and then in North Italy. The Department observes that the largest groups consist of the credits of the savings banks, people's banks and co-operative societies, even those denominational in character, most largely to be found in Tuscany, Emilia, Venetia and Lombardy, while in Latium we find mortgage credits principally in favour of the religious organisations.

The land credit institutes possess more than three per cent of the mortgage credits, for an amount of about 23% of the total registered in the Kingdom. These deserving institutions are: the Bank of Italy, the Bank of Naples, the Bank of Sicily (for the special business of land credit in case of liquidation), the Italian Land Credit Institute, The Opera Pia of San Paolo of Turin, the Savings Bank for the Lombard Provinces in Milan, the Savings Bank of Verona, the Monte dei Paschi of Siena, the Savings Bank of Bologna and the Sardinian Land Credit Institute. Besides these, there were classed among the land credit institutes, as having the special characteristic of such institutes, the independent Consortium for subventions on mortgage to the persons damaged by the eruptions of Vesuvius and the Vittorio Emanuele III Institute (provisional section, for rebuilding in communes damaged by the earthquake in the provinces of Calabria. Altogether, the loans amounted to 28,698 for 987,680,774 lrs. These loans have been granted for more than a third part of their total value at rates not exceeding  $3\frac{1}{2}\%$ , and for the rest at rates a little higher, the proportion of which has been reduced since the legislative provisions for the reduction of the legal rate of interest came into force. Seldom do we find a rate above  $4\frac{1}{2}\%$  and only in the case of a very few Sardinian land credit operations, of ancient origin, was the rate slightly over 5%. Sometimes there were even low rates of 2% on loans for special purposes of public utility, as, for example, for the repair of damages produced by earthquakes, floods, landslips, volcanic eruptions, etc.

The group of provinces that have benefited least by the land credit institutes is that of the islands.

The State and the Public Worship Fund have still many mortgage credits for an amount of a little more than 1% of the total registered in the Kingdom. For the most part, these are dues devolving to them as inheritors of the ancient domains and of ecclesiastical property; there are also others securing the balance of purchase prices still due and others that are judicial mortgages. On some for dues of ancient origin the interest is high; but, since the laws in favour of dismortgaging and the possibility of postponement or compromise greatly assist the debtors, it may be considered that this portion of the mortgage indebtedness is not burdened so much and will be more and more reduced.

The greater part of the mortgage credits of the kind affect property in Southern and Insular Italy, more particularly in Basilicata, Calabria

Sicily and Sardinia. In some districts of Sardinia, a singular state of things is to be observed. In that of Oristano, for example, one third of the mortgage credits for an amount of more than one fifth of the total, belongs to the State and the Public Worship Fund; in that of Tempio Pausania, about half belongs to the State, the Public Worship Fund and the communes and other incorporated bodies; in that of Nuoro, about one third of the credits on mortgage, both as regards number and value, belongs to the State, the Public Worship Fund and the communes, while a large proportion of the rest belongs to incorporated bodies, so that, the smallest portion of the credits representing about one fourth of their value, belongs to private individuals. These circumstances contribute to show the slow transformation of these districts from an economic point of view.

Very small, that is less than one hundredth part of the whole, is the total amount of mortgage credits belonging to the communes and the provinces. These also for the most part secure the annual dues from the domains or the balance of purchase prices.

### § 3. THE MORTGAGERS.

The mortgage debt weighs especially heavily on private persons, who bear about nine tenths of the whole burden and, in most cases, pay the highest interest. Only in the districts of Bobbio and Peltre do they bear it alone.

The larger portion of the other tenth, on which generally low interest is paid, is borne by incorporated bodies and commercial societies. The greater number and the largest amount of these debts are supported by North and Central Italy, where often societies guarantee their bonds on their real estate and workshops. This is most frequent in certain districts of Piedmont (Novi Ligure, Saluzzo, Novara, Pallanza, Varallo, Ivrea and Susa), of Liguria (Chiavari and Savona), of Lombardy (Bergamo, Breno and Brescia), of Venetia (Belluno and Venice), of Tuscany (Portoferraio), of Umbria (Spoleto) and is also to be noted in certain districts of the South as in Abruzzi (Aquila) and Apulia (Bari).

We must mention a group of 387 mortgages for the amount of \$1,600,000 francs separately reported, passed by building societies and institutes of every kind. These are institutes of recent formation, that are gradually extending themselves in the larger centres, often with the encouragement of the State or the communes, with the object of solving the problem of the moment of the high price of lodgings, which is continually becoming more serious, such institutes having need of large credits. It will be certainly well to consider the further development of the mortgage indebtedness of these bodies, distinguishing them from the rest. They generally benefit by low interest, that being an essential condition of their life. The largest number are to be found in Campania, on account of the large credits granted at one time to the Naples Risanamento Society. They

are also found in large numbers in North and Central Italy, especially in Turin, Alessandria, Genoa, Bergamo, Milan, Bologna, Modena, Florence and Rome; but in most of the districts, and principally in the islands, this special application of mortgage credit is little if at all known.

§3 A hundredth part of the total debt is borne by the communes and the provinces owing to the important fact that some communes, especially in North and Central Italy have succeeded in obtaining loans from the local banks.

§4 The State owes about 1,000,000 frs. on mortgage, chiefly in Central Italy, partly for purchase of real estate paid for in instalments, partly for expropriations for purposes of public utility.

The Public Worship Fund owes the somewhat insignificant balance.

The burden of the debt must not, however, be considered only in regard to the amount, but above all in regard to the interest.

The development of credit is an indication of economic progress, if the rate of interest remains low, if the credit is utilised for purposes of production, if easily granted on the various kinds of property and business activity, on favourable conditions for repayment. The relations between the mortgage debt and the conditions of landed property must, therefore, be studied in respect to their quality and principally in respect to the interest on the different investments, which may constitute the most evident indication of the conditions of the debtors. Such a study must be as detailed as possible, for even in regions that show many signs of prosperity there may be districts of comparative poverty, and, sometimes, in other districts, where the savings and the business activity are of small importance and usury is rife, there are cases in which the conditions of the debtors are by comparison better.

Now it may be said that, while between 1903 and 1910 the amount of mortgage indebtedness in Italy has increased by 587,000,000 frs., giving an average of 84,000,000 frs. the year, the rate of interest has, on the other hand, been considerably reduced; so that the debtors have succeeded, generally, in obtaining better conditions on the market, the reduction of the legal interest by 1 % per annum, in accordance with the law of June 22nd, 1905, representing only a detail in the general improvement.

Indeed, the various classes of mortgage, divided in accordance with the rate of interest, corresponded with the following percentage of the indebtedness at the end of 1903 and 1910, respectively:

	End of 1903	End of 1910
At Interest not exceeding 3 $\frac{1}{2}$ % . . . . .	4.36	11.67
" " between 3 $\frac{1}{2}$ % and 5 % . . . . .	71.72	72.50
" " " 5 % " 8 % . . . . .	22.60	14.61
" " " 8 % " 10 % . . . . .	2.00	1.51
" " exceeding 10 % . . . . .	0.23	0.27
	100.00	100.00

The improvement is evident, indeed remarkable for so short a period, and general. The exception in the small group of investments at more than 10 %, which shows a slight increase, is due to the influence of the life annuities and annual dues capitalised at high rates of interest, more severely estimated on December 31st., 1910.

While in North Italy alone the indebtedness increased by 174,000,000 frs. and in Central Italy, by 169,000,000 frs., the reduction of the rate of interest was general in the whole Kingdom, although chiefly in all the regions of North Italy, especially in Lombardy and Piedmont, and in Central Italy, principally in Tuscany, Emilia and Latium, owing to the capital contributed by the latter. Since it is a question of the regions most advanced from the point of view of agriculture, industry, commerce and building, it may be concluded that, in general, the improvement of the situation of the debtors has benefited economic enterprise.

Even in South and Insular Italy the reduction of the burden of the interest is evident, although in less degree and less uniformly in the various regions. Here more than elsewhere we frequently find districts in which the burden is heavy, as appears from an examination of the various districts of registry offices.

#### § 4. CAUSES OF THE INDEBTEDNESS.

The mortgage indebtedness is principally due to loans, corresponding with about half the mortgages and four fifths of the amount.

The loans increased considerably from 1903 to 1910, that is by about 700,000,000 frs., principally in North Italy, by 487,000,000 francs, then in Central Italy by 205,000,000 frs., and in the islands by 25,000,000 frs. On the Southern mainland there has been a slight decrease, except in Abruzzi and Apulia.

It will be well to give the following percentages of the total mortgage indebtedness as established for loans in the different divisions of the Kingdom.

	Number of Mortgage Loans	Amount of Mortgage Loans
North Italy . . . . .	68.72	85.25
Central " . . . . .	41.04	76.83
South " . . . . .	37.86	74.96
Insular " . . . . .	37.84	57.32
Italy . . . . .	47.85	78.18

Another important class of mortgages secure annual dues and life annuities. This class includes about a third of the whole number of mort-



gages, corresponding with a little less than one tenth of the amount. The total amount of annuities secured is about 22,000,000 frs., corresponding with a capital of 415,000,000 frs.; but this source of debt is decreasing.

The smallest group of mortgages secures the balance of the purchase price of land and corresponds with about one twentieth equally of the number and amount of the mortgages. There is, however, a slight increase in this class, especially in North Italy.

About 12 % of the number of mortgages corresponding with about 7 % of the total debt originated in another way we have not mentioned amongst the above causes. These are chiefly judicial mortgages and their number is appreciably decreasing. The class is still comparatively important in Insular and Southern Italy.

In regard to the loans, it is to be observed that little less than a seventh of them pay a low interest not exceeding 3  $\frac{1}{2}$  %. This is principally a result of the action of the land credit institutes, which have lent at low rates, 331,000,000 francs out of 417,000,000 frs. Central and Northern Italy have essentially benefited by this notable advantage.

Five sevenths of the amount of the loans, or 2,382,000,000 francs, paid interest between 3  $\frac{1}{2}$  % and 5 %. Here also the land credit and other credit institutes have been of very effectual assistance, the former lending 656,000,000 frs. and the latter 703,000,000 frs.; which are shown in the report as lent by credit institutes and incorporated bodies. Northern and Central Italy have derived the chief benefits from this also very advantageous situation.

The highest rates of interest, above 5 %, are paid on little more than one seventh of the whole amount of the loans, that is on 526,000,000 frs., while interest above 8 % is paid on hardly one hundredth part of the total amount of the loans. In this case, however, the situation is most serious in South Italy and the islands.

There is a great difference in the various districts both in regard to the amounts lent and in regard to the interest; however, the general tendency in the different regions is that indicated above for the great divisions of the Kingdom.

In the southern mainland and the islands we find here and there a larger number of loans in certain districts of Abruzzi, at Naples, in the Terra di Lavoro, in the provinces of Bari, Foggia, Reggio Calabria etc., where the interest paid is not too heavy, than we find in other places, as at Catania, Cosenza, etc. where the action of the land credit institutes and the banks is more important. And, on the other hand, where this action is less intense, and enterprise is lacking, the condition of the debtors is comparatively worse, as for example, in the districts of Basilicata, Caltanissetta, Lanusei, Nuoro, Oristano, etc.

In North and Central Italy there are, however, here and there, districts where the situation of the debtors is comparatively less advantageous; however, in general, the conditions are tolerable enough. In some districts, however, the amount of the loans far exceeds the already high average of the division, so that the mortgage debt is almost entirely due to loans and

rate of interest is very low. Thus, for example, in Lombardy the amount of the loans was 91 % of the registered mortgage debt and this high proportion is even exceeded in some districts, at Bergamo, Brescia, Cremona, Piacenza, Milan and Salò; at Breno it reaches the maximum, 98.21 %. The same general remarks may be made with regard to the districts of Varallo, Piedmont, Chioggia, Udine, and Venice, in Venetia. As regards the rate of interest, often it is not higher than 5 %, and low rates up to  $3\frac{1}{2}$  % are frequent; as is especially observable, for example, in Piedmont, in the districts of Turin, and Varallo; in Liguria, in those of Genoa, Imperia and Savona; in Venetia at Bassano, Padua and Venice; in Lombardy at Breno (where 97 % of the total mortgages pay interest up to 4 %) and above all at Milan, where 99 % pay similar rates, this being the highest percentage paying these rates; in Tuscany, at Florence, Grosseto, Montepulciano, Pescia, Portoferraio and Volterra; in Emilia at Bologna and in Umbria at Orvieto.

#### § 5. THE LOANS AND THE TERM FOR WHICH THEY ARE GRANTED.

Most of the loans in Italy are long term loans, not perhaps expressly intended so, but becoming so owing to their renewal by agreement and through transfers.

These long terms are largely the effect of the operations of land credit institutes, which have consented to repayments continued over a long period of years.

There is observable a reduction of the interest on loans repayable in shorter periods.

The shorter terms are more frequent in North and Central Italy.

But the distribution of the rate of interest does not present very important variations to the various terms for which the loans are granted.

#### § 6. LOANS OF THE LAND CREDIT INSTITUTES.

At the end of 1910 the loans granted by the Land Credit Institutes amounted to 987,800,000 francs, or about 30 % of the total amount of the loans and about 23 % of the total amount of the mortgages registered in the Kingdom.

This shows the very great importance of the land credit institutes for the national economy and, when we consider the advantages they confer on the money market, through the abundant supply of available cash, the low rate of interest and the possibility of later conversion at lower rates, when circumstances allow of it, we see at once how powerfully they may assist in the development of agriculture, house building and all undertakings requiring considerable real security.

Thus, the paternal care of the law in organising this form of credit made manifest: it was a difficult task and sometimes imperfectly performed owing to the difficulties in the way of civil legislation and those due to war of capital and the abuses verified in the first decades of the national unit due to insufficient vigilance on the part of the State.

In later years there have been effectual indications of its renewal: the liquidation of the land credit institutes of issue, causing the institutes to devote their whole activity to their special business; the liquidation of one of the land credit institutes of Latium, the financial situation of which was worst; the foundation of an Italian Institute for the whole Kingdom in contrast with the institutes already existing, with limited local sphere of action; and the intensified vigilance of the State. At the same time the study of these important matters has been recommenced and weighty discussions have been held in regard to the possibility of converting mortgage debt into land debt.

The statistical return for the period ending with 1910 for the first time duly brought into relief the operations of these special institutes in Italy, the sphere of action of which is fairly extensive and made possible an examination into their extension, their advantages and some of their defects. It, in fact, shows the amount of the loans made, the rate of interest, the nature of the holdings assisted, and the distribution of the loans according to their amount: that is loans not exceeding 1,000 francs; loans between 1,000 frs. and 10,000 frs.; between 10,000 frs. and 50,000 frs.; and those exceeding 50,000 francs, considering always their territorial distribution. Since generally the largest possible of land credit is applied for, and it is granted, generally, up to half the value of the holding, it may be admitted that the above distribution of the loans in four groups corresponds with the assistance given respectively to very small, average and large holdings.

We arrive then at the following results:

TABLE V. — *Distribution of Land Credit in the Kingdom.*  
on December 31st., 1910.

	on Land		on Buildings		on both Land and Buildings		Total	
	Number of Credits	Amount	Number of Credits	Amount	Number of Credits	Amount	Number of Credits	Amount
North Italy . . .	14,229	38,150,182	8,380	181,677,660	4,019	180,736,943	13,828	109,95
Central " . . .	2,131	55,390,313	2,000	90,128,548	4,269	182,479,575	8,490	333,97
South " . . .	1,641	62,144,768	1,590	77,128,970	1,179	54,101,825	4,410	193,57
Insular " . . .	831	26,708,076	442	7,470,134	727	16,681,580	2,000	50,82
ITALY . . .	6,832	182,423,339	12,412	362,405,312	10,194	443,001,923	28,686	587,36

The average amount of the land credits granted was therefore: in Kingdom, 34,422 frs.; in North Italy, 29,619 frs.; in Central Italy, 479 frs.; in South Italy, 43,849 frs. and in the islands 25,460 frs. The average amount is most considerably exceeded in Lombardy, Umbria, Campania, Apulia and Calabria, and the maximum is reached in Latium, and Basilicata, where great assistance is given to the large landed estates, but where more than anywhere else, we find, among the large credits to the aristocratic families, loans for purposes of consumption.

In respect to the nature of the holdings benefiting by land credit, it is to be observed that they are chiefly rural holdings in Marche, Apulia, Basilicata, Calabria, Sicily and Sardinia. The assistance given to landed property and to the agricultural transformation of these regions, as, for example, in Apulia, cannot be denied. On the other hand, in Piedmont, Liguria, Lombardy, Latium and Campania, where land credit has greatly assisted the development of the urban centres, especially at Naples and Rome, it is chiefly buildings that benefit.

In the other regions again, credits at once on both land and buildings predominate.

Finally, it is to be noted that in some districts (only, however, in North and Central Italy) the amount of the land credit operations exceeds 50 % of the mortgage loans of the districts and constitutes the largest proportion. In Tuscany, at Siena, Grosseto, and Montepulciano they even exceed 50 %, which shows the facility of finding cheap credit in those parts.

In regard to the rate of interest, it is to be observed that little more than one third of the capital lent in land credit operations is invested at very low rates not exceeding  $3\frac{1}{2}$  %; while the rest is lent at about 4 %. The *relazione* to the statistical report mentions in this connection that "*seldom the rate of interest more than  $4\frac{1}{2}$  %, and on raising the credit cards of these institutes we find a general lowering of the rates of interest since the laws have authorised their conversion at a lower rate.*" The former debtors of these institutes have, therefore, generally eagerly profited by the improved conditions of the money market.

The principal group of land credit operations is that in which the amounts exceed 50,000 francs. These amounted to 709,000,000 frs. or a little less than three fourths of the total amount of the land credit. The average amount of these loans is 156,838 francs.

The operations between 10,000 frs. and 50,000 frs. amounted to 250,000,000 frs., or a little less than a fourth of the whole amount of the land credit, with an average of 28,487 francs per loan.

The small remainder is distributed as follows: 49,000,000 frs. in operations for amounts between 1,000 frs. and 10,000 frs. with an average of 4,076 frs. per loan, and 2,000,000 frs. in operations for less than 1,000 frs. with an average of 435 francs. In these latter groups, that is operations for small amounts, there are, however, included the balances remaining in the other cases, and so the real operations in favour of small and very small holdings are really insignificant in number and amount.

This, in our opinion, is very important. It shows that the land credit institutions are too aristocratic in tendency. The advantages they offer do not penetrate the lower strata of landed property, which, however, in our country form the largest portion, and still remain a prey to the usurers, although the law intended to bring them relief, by means of a improved organisation of land credit.

A final consideration will serve to show the extension of land credit in Italy.

While it is not possible to make an accurate comparison between 1903 and 1910 in this connection, for want of special statistics in relation to these Institutes at the earlier date, it is apparent from the preface to the return for 1910, that, as results from studies inspiring confidence, we may consider that, in the interval, land credit has increased in amount from 16 % to 23 % of the total debt on mortgage in the Kingdom.

This would prove the possibility of the gradual and spontaneous conversion of the mortgage debt into land debt, which could take place without the need of special legislation.

Now if the existence of this natural substitution is thus proved, it is however, also true that the movement is too slow, hardly amounting to 1 % per annum, while personal estate suffers still more and the increasing acuteness of contemporary economic problems demands the speedy increase of agricultural production, housebuilding, works of public utility and a large supply of labour. Land credit may be an excellent investment for a large number of undertakings with slow returns and small incomes. It, therefore, might become an instrument of social and economic policy if applied with prudence and under careful supervision. It deserves therefore, further attention from the legislators, who would act usefully in facilitating its development, guided by the natural tendency to extend it. It has given proof of, and enlarging its horizon by making it more democratic.

When we see that in some districts this land credit, may be through the wise action of men, has made a place for itself in business, absorbing the majority of the mortgage loans at very high percentages, when we find it in some urban centres financing in large part the transformation of buildings, in certain regions revivifying the transformation of agriculture and then, that many other centres and regions, also of importance, languish for want of such credit, while masses of capital are lent at usurious interest by private persons, when we see entire and large classes of holdings are almost neglected, because their importance is slight, while they also have need of cheap credit to be repaid in instalments over long periods, there is reason to believe that a more rapid increase of land credit is not checked by substantial obstacles of insurmountable nature, but rather by insufficient organization, for which a remedy could be found.

## § 7. REAL ESTATE MORTGAGED.

The last results relate to comparison of the debt in relation to the population of the communes where the mortgages are registered, their juridical nature and the class of holdings burdened, that is, whether they are rural estate (intended for farms and entered in the rural cadastre) or urban estate (for dwellings or workshops and registered in the urban cadastre) or both together as the civil code of the country allows mortgages to be passed on both classes of property at the same time.

In this connection, we may mention that the registrations are most numerous in the very small rural communes, with populations not exceeding five thousand inhabitants and there the annual dues and life annuities are most numerous. The amount of the debt on mortgage in these communes was 963,000,000 frs.

The largest amount of mortgages burdens estate in the large urban centres, with more than 100,000 inhabitants. In these centres, 1,051,000,000 frs. is registered or a fourth part of the mortgage indebtedness of the nation, and buildings are the heaviest burdened, as is seen from the following table :

## ITALY - CREDIT

TABLE VI. — *Interest Bearing Mortgage Debt on December 31st., 1910.*

	Interest Bearing Mortgage Debt on December 31st., 1910.				On Boda Land and Buildings				Total	
	In the Large Towns (with more than two,000 inhabitants)		On Land		On Buildings		On Boda Land and Buildings			
	Number of Credits	Amount	Number of Credits	Amount	Number of Credits	Amount	Number of Credits	Amount	Number of Credits	Amount
Bari . . . . .	457	3,358,802	1,701	6,379,520	316	2,111,011	2,974	11,849,333		
Bologna . . . . .	76	2,260,803	1,093	13,986,487	640	11,206,585	1,721	27,447,877		
Catania . . . . .	973	3,708,844	2,090	10,566,766	884	6,119,209	3,947	20,394,819		
Firenze . . . . .	138	1,110,569	2,912	39,829,452	535	10,198,052	3,585	51,138,013		
Genoa . . . . .	225	8,022,607	2,239	55,573,373	164	9,357,522	2,628	72,953,502		
Leghorn . . . . .	51	326,653	921	7,557,223	240	4,050,565	1,212	11,934,441		
Messina . . . . .	879	2,444,110	1,250	4,523,655	1,137	5,276,875	3,257	12,244,646		
Milan . . . . .	276	10,955,518	4,317	295,418,002	1,580	86,320,303	6,373	302,693,883		
Naples . . . . .	497	5,617,692	7,304	130,591,993	925	17,983,941	8,636	154,196,536		
Palermo . . . . .	2,308	12,578,163	4,308	26,501,788	1,277	10,692,068	7,893	49,772,019		
Rome . . . . .	791	39,556,773	3,404	186,257,813	319	22,739,906	4,514	242,554,492		
Turin . . . . .	187	2,572,383	1,666	44,454,769	1,316	29,539,095	3,100	76,566,246		
Venice . . . . .	2	16,185	914	17,682,082	95	2,696,985	1,011	20,489,252		
Total . . . . .	7,261	92,529,019	31,171	743,319,808	9,428	218,286,117	50,860	1,054,138,059		

Next in importance as regards their amount come the mortgages in communes with between 5,000 and 20,000 inhabitants (924,000,000 frs.), then those on groups of holdings in the territory of more than one commune (695,000,000 francs).

Last, as regards their amount, come the mortgages in communes with a population of from 20,000 to 100,000 inhabitants (615,000,000 francs).

As regards the character of the mortgages, most of them are conventional, in number 657,875 for an amount of 3,888,000,000 francs, which corresponds with the greatest frequency of the loans. Next come, but at a great distance, judicial mortgages, in number 111,856 and, in amount, 241,000,000 frs., and, finally, legal mortgages, in number 38,939 and in amount 212,000,000 francs.

Considering the nature of the estate mortgaged, we find the largest amount burdening groups of land and buildings together. This is due either to the requirements of the creditors who want important security and also to the fact that often buildings have dependent land attached registered in the rural cadastre or, on the other hand, the rural holdings include dwelling houses. Sometimes, also, perhaps, the necessity for the debtors to ask the maximum amount of credit possible has induced them to offer as security groups of property of different classes, and the judicial mortgages which also may be passed on all the debtor's property may contribute to this state of things.

Next come, in relation to their amount, the mortgages on buildings, mostly in the large urban centres.

Finally, from the point of view of amount, although they are more numerous, come the mortgages on landed estate.

However, the tendencies are not everywhere the same. In the islands, the burdens on land are the most important, and in the South they are also high. If we consider the various regions, the indebtedness on land is highest in Sicily, Basilicata, Apulia and Marche; the indebtedness of buildings is most considerable, on the other hand, in Campania, Latium and Liguria.

In the various districts there is greater diversity, except that in those of Apulia, Calabria, Campania, the Abruzzi and Emilia, the distribution of the burdens in regard to the various kinds of property is remarkably uniform.

After this rapid summary of the contents of this important statistical return, we may be permitted to hope that the Italian Department of Finance will continue the course it has entered upon. Thanks to the two enquiries in regard to the mortgage indebtedness for the period 1874 to 1910, light has been shed on the conditions of landed property and credit in this first and difficult period of the life of the united nation. But five more years, rich in events, have now passed and years of greater prosperity are looming on the horizon: it will not be one of the Department's least merits to have aided continuously in the collection of facts and observations serving to make clear the steps in the economic progress of the nation.





## Part IV: Miscellaneous

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### AUSTRIA.

#### FARM READJUSTMENT IN LOWER AUSTRIA AND MORAVIA FROM THE BEGINNING OF THE WORK (1890) TO THE END OF 1913.

In the number of the Bulletin of Economic and Social Intelligence for March last we published an article on "Land Operations in Austria according to State and Provincial Law". The second section of that article gives a general summary of the principles inspiring the legislation on the operations of farm land readjustment and shows the practical method in accordance with which these operations are initiated and brought to their conclusion; the tables summarising the land operations carried out in Austria up to the end of 1913 at the end of the above article show the operations completed in each province and contain information in regard to the farm readjustment, as to the number of operations, the area and the number of persons affected.

As we know, farm land may be readjusted with comparative facility in the plains, that is to say in those regions, that, on account of the conformation of the soil and the uniform character of the farms, afford no ground for dispute; the provisions of the law themselves are there as a rule more easily applied.

These conditions are certainly presented by Lower Austria and Moravia and in these two countries the farm land readjustment has proceeded with great rapidity and given excellent results.

We have now been enabled by means of unpublished official information received from the Agricultural Department of Vienna to throw additional light on certain sides of the problem and thus accurately to calculate the percentage of the decrease of the subdivision of parcels, the number of separate holdings before and after readjustment, the increase in the value of the holdings in these two provinces and to obtain an average for these and

other values per operation, per person affected and per hectare subject to readjustment.

The work of farm readjustment in Lower Austria and Moravia was commenced in 1890. In the 23 years between that date and the end of 1913, in the two provinces 105 works of farm readjustment were completed, 52 in Lower Austria and 53 in Moravia.

*Lower Austria.*

Altogether the readjustment affected an area of 54,339 ha. and 5,216 individuals.

The number of the parcels before the readjustment was . . . . .	49,058
and after the readjustment . . . . .	13,890

Showing a decrease in the number, of . . . . .	36,068
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or a decrease of 72 %.

It is a matter of great importance to be able to ascertain the increase in the value of the holdings after the readjustment; and we find that in the case of the above holdings it was . 23,872,131 crs.  
From which the costs must be subtracted, on an average, 6 % of the increase . . . . . 1,432,328 "

So that the net increase in value was . . . . . 22,439,803 crs.

On an average each work of readjustment affected an area of 1,044 ha. and 100 individuals, and caused a reduction of the number of parcels from 960 to 267, or a reduction of the number of separate holdings by 661 or 72 %; and an increase in the value of 459,079 crs. against an expenditure of 27,545 crs.; and so a net increase of 431,534 crs. On an average for each individual owner we may reckon an area of 10.44 ha.

The increase in value per owner was . . . . .	4,590 crs.
Less expenditure . . . . .	275 "

giving a net increase of . . . . .	4,315 crs.
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For each ha. of the area readjusted we may calculate an increase in value of the amount of . . . . . 440 crs.

Less expenditure . . . . .	6 "
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giving a net increase of value of . . . . .	414 crs.
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corresponding to an annual net yield of 21 crs.

The expenditure of 26 crs. once for all incurred is therefore covered by the increased annual yield of 21 crs. in the second year.

In order that the meaning of these averages may be better understood, we summarise the figures in the following table.

*Average Figures.*

	Area Re- adjusted ha.	Number of Indi- viduals Affected	Number of Separate Holdings		Percentage of Decrease in the Sub- division	Increase in Value — crs.
Per Work of Readjustment	1,044	100	960	267	72	459,079
Expenditure . . . . .						27,515
Net Gain . . . . .						431,534
Per Individual Owner	1,044		9.6	2.7	72	4,500
Expenditure . . . . .						275
Net Gain . . . . .						4,315
Per Hectare . . . . .						440
Expenditure . . . . .						26
Net Gain . . . . .						414

or Annual Yield from Increased Value  $414 \times 5\% = 21$  crs.

against Expenditure once for all of . . . . . 26 crs.

### *Moravia.*

Altogether the 53 readjustment operations affected an area of 22,602 ha. and 5,502 individuals

The number of the parcels before readjustment was . . . 62,126  
and after the readjustment . . . . . 13,109

Showing a decrease in the number, of . . . . . 49,017

or a decrease of 72 %

The increase in the value of the holdings after readjustment  
 was altogether . . . . . 9,444,850 crs.  
 From which the costs must be subtracted, on an average, 9 %  
 of this increase. . . . . 850,096 "

So that the net increase in value was . . . . . 8,594,814 crs.

On an average each work of readjustment affected an area of 426 ha.  
 and 104 individuals, and caused a reduction of the number of parcels  
 from 1,172 to 247, or a reduction of the number of separate holdings by 92 %  
 or 79 % ; and an increase in value of 178,205 crs. against an expenditure  
 of 16,038 crs. ; and so a net increase of 162,167 crs.

On an average for each individual owner we may reckon an area of  
 4.10 ha.

The increase in value per owner was . . . . . 1,717 crs.  
 Less expenditure . . . . . 155  
 giving a net increase of . . . . . 1,562 crs.

For each ha. of area readjusted we may calculate an increase of value  
 to the amount of . . . . . 418 crs.  
 Less expenditure . . . . . 38 "

Giving a net increase of value of . . . . . 380 crs.  
 corresponding with an annual net yield of 19 crs.

The expenditure of 38 crs. made once for all is therefore covered by  
 the increased yield of 19 crs. after the second year.

To make the meaning of the averages also for this province clearer,  
 we summarise the figures in the following table, corresponding with that  
 given for Lower Austria.

*Average Figures.*

	Area Re- adjusted — ha.	Number of Indi- viduals Affected	Number of Separate Holdings		Percentage of Decrease in the Sub- division	Increase in Value — Crs.
			Before	After		
Per Operation . . . . .	426	104	1,172	247	79	178,205
					9 % Expenditure . .	16,038
					Net Gain . . . . .	162,167
Per Individual . . . . .	4.10	1	11.3	2.4	79	1,717
					9 % Expenditure . .	155
					Net Gain . . . . .	1,562
Per Hectare . . . . .						418
					9 % Expenditure . .	38
					Net Gain . . . . .	380
Annual Increase of Yield $380 \times 5\%$ . . . . .						19
The Expenditure once for all . . . . .						38
Therefore covered by the Increased Yield in the second Year.						

Summarising the net gain in the two provinces obtained by the farm readjustment operations and calculating the annual interest obtained we get.

Net Gain: Lower Austria . . . . .	Crs. 22,439,503
Moravia . . . . .	8,594,814
Total . . . . .	Crs. 31,034,617
Net Annual Gain . . . . .	1,349,330

Comparing these figures, we see at once that in Moravia the area of the individual districts readjusted is far inferior and does not amount to even half that we find in Lower Austria. And again the area owned by an individual proprietor in Moravia does not amount to half that of one in Lower Austria, owing especially to the greater number of owners of very small holdings and houses in Moravia. On the other hand, in Moravia the subdivision is almost twice as great as in Lower Austria.

The greater expenditure in the case of Moravia as compared with Lower Austria is to be attributed to the small holdings, the greater subdi-

vision of the land and the heavier expenditure on the roads which in Moravia have to serve for the transport of beetroot from the farms.

The 105 works of farm readjustment carried out in 23 years in the two provinces gave altogether a net gain of 31,034,617 crs.; the net annual gain was therefore 1,349,330 crs. This sum is by no means in excess of the real gain; it was calculated in accordance with careful returns made separately and freely in each province.

This evident success deserves the greater attention, as the net gain from the readjustment is more than ten times the expenditure that was required and the owners receive the benefit of it after a very short time in this way it is clear that readjustment contributes to increase the prosperity of the rural population of the plains. Besides these material advantages, farm readjustment provides a means for meeting the well known deficiency of labourers in the plains, as the new division and the fact that the farms are less subdivided reduces the demand for labourers; this result is further facilitated by reason of the new arrangement of the holding permitting of a more extensive utilisation of agricultural machinery in the place of human labourers.

## FRANCE.

### AGRICULTURAL EFFORTS IN FRANCE DURING SIX MONTHS OF WAR.

(August, 1914 — January, 1915).

Under the title : *L'effort agricole de la France pendant six mois de guerre (août 1914-janvier 1915)*, the Department of Agriculture gives a general report (Paris, Imprimerie Nationale, 1915) of its efforts since the beginning of the present war and we think a resumé of its statements will be interesting to our readers.

#### § 1. AGRICULTURAL CONDITIONS AT THE BEGINNING OF THE WAR. AGRICULTURAL LABOUR AND SOLIDARITY. RESULTS OBTAINED.

At the beginning of July, during the period of diplomatic tension before the breaking out of hostilities the Minister of Agriculture took the agricultural condition of the country into serious consideration. All over France the grain harvest was then being gathered. In the north and east a large quantity of oats were not yet reaped and in many places the wheat was still in stooks in the fields.

The sudden decrease in the number of labourers in consequence of the general mobilisation, made the completion of the harvest difficult. But immediate threshing of the wheat and oats was necessary as grain was wanted for the supply of the army.

As far as possible to obviate the difficulties caused by the want of labourers, the Minister of Agriculture, on the first of August, began writing to all the prefects instructing them to arrange with the heads of the agricultural services to employ all available hands for the best interest of the country, not only for the hay and grain harvests, for threshing, storing and preserving grain, straw and cattle foods, but also to secure seed for the next sowing.

That more weight still might be added to these directions, a pressing appeal was addressed to the women of France by the Prime Minister.



In the mean time all the applications of industrial workmen thrown out of employment were received at the Department of Agriculture. There were more than 3,000 who thus applied individually, after the outbreak of hostilities, and of these 2,600 offered themselves as reapers. More than 12,000 applications for employment from syndicates, agricultural societies, and private companies came from Alsace-Lorraine, Italy and Spain to the Minister of Agriculture, transmitted through the legations of Belgium and Roumania. All were replied to by an agricultural labour service immediately organised at the Minister's Office. These applicants, few at the beginning of the month, were much more numerous before its close.

Through the efforts of the larger agricultural societies and of the Belgian Legation etc. to whom the applications were immediately transmitted, a considerable number of the applicants for agricultural labour were soon employed, especially in the extensively cultivated departments such as Seine, Seine-et-Oise, Aisne, Eure, Eure-et-Loir, Seine Inférieure, and then in Yonne, Côte-d'Or, Indre and Loir-et-Cher.

In Seine-et-Oise and in Loir-et-Cher more than 700 Belgians were provided with work. In other districts men from the adjoining countries were employed. Thus several hundreds of labourers of French origin settled near Geneva were employed in 35 communes of Haute-Savoie.

After this first effort of solidarity, new needs arose which had not been contemplated at the breaking out of the war, or which the nature of the agricultural work did not then reveal. Numerous communes, agricultural societies and private persons, especially at the time of threshing, applied to the Minister for agricultural machinery of all descriptions. The ministerial services put themselves into communication, through the syndicates of manufacturers of such machinery in France, with more than sixty firms, and to these all the applications were forwarded, as they arrived at the Department. The greater number of these firms, through their local agents, were able to meet the demands of almost all the regions of the Kingdom. Of these more highly cultivated, being best supplied with plant, made but few demands.

The good will of all the agricultural organisations, as well as that of the Administration, as regards the supply of labour and machinery, never failed in any respect. Promptness and unanimity reigned throughout.

At length the Departments of War and Marine gave over 20,000 navy conscripts to the Department of Agriculture, to be divided among those departments where the need of labour was greatest.

Thus, by methodical organisation of local resources in much subdivided districts, by the activity displayed by the women, children, and old men who had remained on the farms in the villages, and the assistance of those escaped from fortified places and those out of work in industrial towns who had come to the country in search of an easier life, in spite of some delays and inevitable losses incurred through the necessary haste, almost the entire harvest was gathered in. It was only in the extreme north and east that the invaders came while the oat crop was being cut or the wheat still

in stooks in the fields. We subjoin a report of the approximate value of the harvest in grain, oats, potatoes etc.

*Wheat.* — The crop seemed at first but mediocre, and a serious deficit was apprehended with a probable value of about 80,000,000 quintals. But after threshing, which was at once proceeded with, the result surpassed all hope, and the departmental services were able to report a total of 87,000,000 quintals (the ordinary consumption being 94,000,000 quintals).

But alas ! the partial or total invasion of ten departments in the north and east lost to France about 7,700,000 quintals, so that the total harvest was reduced to 79,300,000 quintals.

*Oats.* — The promise was encouraging, and the total return was expected to be 54,000,000 quintals at the least, the average for the last ten years having been 48,412,000 quintals. But, as with the wheat, the losses caused by the invasion amounted to 7,600,000 quintals and the total quantity saved was only 46,400,000 quintals.

*Rye.* — This crop amounted to 12,800,000 quintals (the average for the last ten years having been 13,297,000 quintals) but the losses in the invaded departments are estimated at 850,000 quintals, leaving an available total of 11,957,000 quintals.

*Barley.* — The crop surpassed the average of 9,630,000 quintals; the harvest produced 10,700,000 quintals, but the loss of 660,000 quintals in the departments occupied by the enemy reduced it to 10,035,000 quintals.

*Potatoes.* — Altogether the potato crop was good. Accounts show that it reached a total of 140,000,000 quintals (the average for the last ten years being 132,223,000 quintals). In the invaded departments the losses were valued at 7,200,000 quintals, leaving only a total of 132,800,000 quintals.

*Wine.* — Like the grain harvest, the vintage was effected with the help of local resources. In the Pyrenean and neighbouring regions, appeal for help was made to Spain, whence for several years gangs of workers have been accustomed to come.

It may be said that the vintage in Champagne was made almost under the fire of the combatants. The work of the vine-dressers of Champagne assisted by the local trade, and facilitated by the military authorities, secured the vintage notwithstanding all difficulties.

Taken altogether, except, however, in the invaded territory, the wine harvest in France in 1914 was as good as that of the preceding year as shown by the following figures :

Continental France	1913	44,845,731	hectolitres
	1914	61,853,705	"
Algeria	1913	7,430,736	"
	1914	10,317,719	"

## § 2. MEASURES TAKEN TO PROVIDE AGAINST THE INSUFFICIENCY OF THE HARVEST.

The above figures show the importance of the measures taken to ensure the preservation and to facilitate the storing of cereals.

By a Decree dated July, 31st., the Government suppressed all customs duties on *grain* i. e. on wheat, spelt, and mixed wheat and rye.

The same day another Decree suppressed the duties on flour of wheat, spelt, and mixed wheat and rye, as well as on bread.

Unground oats and barley, beans and lentils were also exempted from duty by a Decree of August 2nd.

These measures were taken by the Minister of Agriculture after consultation with the Ministers of Commerce and Finance.

A Decree of August 3rd., due to the initiative of the Minister of Agriculture, extended the effects of the two Decrees of July 31st. to Algeria and the new regulations regarding barley, maize, beans and lentils were also made applicable there on August 4th.

On August 13th., a new Decree suppressed all duties on rough rice, broken, and whole rice, flour and semolina.

These regulations enabled the merchants to organise for the importation of these articles. From the day when the duties on grain were removed until December 27th., 1914, the foreign corn imported amounted to 8,397,593 quintals, and if we add to this the amount represented by the flour imported, which we may calculate (reckoning that corn gives 70 % flour) at 1,073,283 quintals, we get a total of 9,470,876 quintals.

In spite of so much imported, not only the Minister of Agriculture, but also those of Commerce, of the Interior and of War have continually received, since the beginning of hostilities, appeals from prefects and mayors for supplies of corn, flour, and salt, their own stocks being about to fail. But it is easy to understand that these local deficiencies arose almost exclusively from difficulty of transport, owing to the military authorities taking possession of the railways. The Minister of Agriculture, in agreement with the Minister of Commerce, took the necessary steps to approach the War Department.

## § 3. THE QUESTION OF MEAT.

*Fresh meat.* — The Minister of Agriculture even before the first application was received or any local victualling commission was at work obtained from the War Minister a series of regulations for the safe-guarding in the future of the national livestock. At the same time it was necessary to facilitate the importation of live cattle and of meat.

By a decree of August 2nd., all customs duties on salted and frozen meat were suppressed. On the 12th. of the same month a Decree exempted from customs duty all horses, mules and asses, and on the 11th. September this exemption was extended to horned cattle.

Besides these facilitations of importation other measures prevented the requisition of

- (1) All cows in calf or giving milk ;
- (2) All brood mares, in foal or already served or with foal at foot ;
- (3) Male breeding stock that had won prizes at agricultural shows or belonging to livestock improvement syndicates ;
- (4) Animals entered in stud books and those under age for entrance but the offspring of parents therein registered ;
- (5) Heifers ;
- (6) Plough Oxen.

At the same time the Department of Agriculture regularly furnished the military administration with notices of the available livestock in the various districts so as to allow of its being requisitioned in accordance with the real resources of the place.

On the other hand, the great learned societies sent to public bodies fervent appeals against the slaughter of young cattle. We must allow that the Minister of Agriculture, having to defend the singularly complex interests with which he is charged, could not agree to this appeal without mature consideration. Agriculture, in the numerous regions where the rearing of calves is almost impossible, would have been completely hindered in its normal progress. The supply of milk to the towns and the butter and cheese industries would have been affected in a way that would have injured the general interests of the public. The want of labourers increased by mobilisation would have been more severely felt if it were necessary to rear the calves on farms where there was no need for it. Finally this would lead to the preservation of stock, for which none of the habitual precautions had been taken. The particularly costly keep of young calves would have to be arranged in the case of many types of crossings without value, with no future benefit to the national breeding stock. It seemed that the measure asked for could not with advantage be applied except in limited districts and in these places the preservation of calves was general. The Minister besides had requested the directors of agricultural services and professors of agriculture to encourage farmers to rear all those calves possessing the requisite qualities, showing them the important advantages they would derive when the animals were grown. He also asked the prefects to endeavour to have these instructions published, with the reasons for them, in all departments where the preservation of calves is possible, and many prefects have done so. The desired result will much more probably be obtained by these local measures than by any general prohibition.

*Frozen meat.* — The plan for victualling the civil population in entrenched camps as well as the army, as was foreseen, necessitated the putting of all the cattle of the nation under contribution. In all the

departments Committees were appointed to buy, or if needful to requisition, the cattle which had to be collected immediately in enclosures, thence to be gradually distributed according to need.

Thus for the camp at Paris, a considerable herd had been collected and divided among a large number of enclosures round the city.

Besides the difficulty of establishing such depots, this plan has others of a serious nature.

For instance thousands of cattle cannot be enclosed in a limited space, for should panics arise among them, the frantic animals throw down the strongest barriers. Therefore these enclosures present great difficulties in regard to their arrangement. The flocks and herds must come on foot to the enclosures, and must be brought on foot to the troops whose needs they are to serve. Animals of improved breeds, and few others are now raised in France, are not adapted for long journeys on foot. And their crowding of the roads along which they must pass is an obstacle and often a peril for marching columns and the movement of convoys.

Another very serious difficulty exists in the danger of contagious diseases when so many animals are assembled together and also of diseases due to over crowding, the more to be feared as they cannot be avoided, in spite of all the efforts of the sanitary authorities.

From an economic point of view, it is plain that the requisition of a great number of animals must leave certain regions unprovided. When these levies are carried out in the north and west, they fall most heavily on dairy and young cattle, while in regions rich in butchers' beasts ready for sale no requisition is made.

Happily, circumstances allowed of some attenuation of the greatest difficulties. The full supply of the camp at Paris could be adjourned, and the proposed stock considerably reduced. Also the contribution demanded from the nation could be diminished by the importation of frozen meat from abroad.

The economic policy of France up to the present time had been formally opposed to the introduction of frozen meat and a double barrier in customs duties and sanitary restrictions almost insurmountable, had existed.

The Minister of Agriculture, by a Decree of August 2nd., 1914, suppressed the rules of a technical nature (obligation to cut up in quarters with adherence of the pluck to one of the fore quarters) which in fact prevented the entrance of such meat, and obtained from the Minister of Finance, by Decree of the same date, the suppression of the duty of 35 francs on every 100 kilograms, the minimum tariff on such imported meat.

Under this new regulation, importers are under no obligation except that of the sanitary inspection to which all meat, whether fresh or preserved, is subjected on entering the Republic.

The War Department had allowed some orders for frozen meat by way of trial, and early in September some thousands of tons arrived at Bordeaux and Marseilles.

But for fear that it could not be used quickly enough before danger of being spoiled, an offer was made to the victualling commission of Bordeaux for the civil population established there of as much of this meat at market price as it could induce the butchers of the town to buy. This offer was immediately accepted, and as some doubts existed as to the reception of the meat by the civil population, a trial was made at Bordeaux in connection with the butchers' syndicate.

This was conclusive. The butchers declared themselves ready to buy as much of this meat as they could get. The price had been fixed sufficiently below that of the home produced meat to ensure its sale. This frozen meat had all to bear indication of its origin and thus fetched a slightly lower price.

The War Department continued its trial of the frozen meat with the troops and the result very soon proved most satisfactory.

The frozen beef arrives in quarters packed in the holds of vessels provided with refrigerators, each quarter weighing from 70 to 80 kilograms. Each is closely wrapped in muslin, with packing cloth over it.

The meat is excellent and equal in quality throughout. The quarters, taken out of the cold storage compartments by sliding panels, are at once piled in waggons ranged along the quay. The straw at the bottom and sides of every wagon is sufficient protection to isolate it.

The waggons being thus packed, the time required for each to reach its destination is specified: three days at least in warm weather, and five at least when the temperature is not above 15°.

This success soon induced the Department not only to replenish the depots with this meat but also to send some to the front where the soldiers so highly appreciated it that it was decided that all ship-loads already arrived or about to arrive should be reserved exclusively for the army, and contracts were also made for a supply of 15,000 tons per month beginning from January 1st., 1915.

The advantages of frozen meat are easily seen. It may be transported from place to place without special precautions; packed in waggons or carts in easily handled quarters, well protected against external soiling; it is of best quality, not over fat and perfectly healthy. It has all the qualities of fresh meat when eaten at the proper time, that is cooled, and kept the necessary time: it is much more tender than meat still warm after slaughter. It is besides incomparably superior to that furnished by cattle tired and often ill, following troops; infinitely superior to the flesh of requisitioned cattle.

Taken altogether, the calculations of the agricultural administration lead to the belief that the quantity of frozen meat consumed in the first six months of 1915 may be estimated at 150,000 tons purchased partly by the War Department, partly by private persons. The meat will be principally beef, representing about 450,000 head of cattle, almost half of what is required weekly in ordinary times. We see that this imported meat will tend to the saving of the home cattle to an unexpected extent.

Let us add that this is a question of *frozen* meat, that is to say of meat subjected at first in the refrigerators to a temperature of from  $-10^{\circ}$  to  $-15^{\circ}$  so that the mass is thoroughly frozen throughout, and afterwards, until the moment of use, to a temperature of from  $-8^{\circ}$  to  $-10^{\circ}$ . If the temperature be maintained only at about zero, such refrigerated meat is of no value for the present purposes.

*Statistics of Livestock on January 1st., 1915.* Though it is very difficult to make an exact computation, the Minister of Agriculture has published the following approximate details of the situation:

(1) *Horned Cattle.* — Taken all together, excluding the invaded departments to which by a rough calculation we may apply a co-efficient of diminution corresponding with that of the others we find a total of 13,297,000 head against 14,807,380 head in 1913, showing a diminution of 1,510,000 or 10.2 %.

These animals however, are not all consumed, for some (40,631 head) are still in the Paris entrenched camp, others in enclosures, and other places and may return to the country if circumstances permit.

The diminution affects the various classes of animals very differently.

The number of bulls has been reduced in the proportion of 12.21 % that is to 249,750 from 284,490. The selected breeding stock has been saved.

The number of oxen has been reduced by 26.47 %, that is from 1,845,620 to 1,357,200, which is not surprising, for it is natural as well as desirable that the oxen should supply beef.

The cows have diminished in number by 9.3 %, that is from 7,807,560 to 7,081,400. We cannot know if dairy cows were recklessly slaughtered, for old cows fattened are included in the category, and also cows that have suffered accidents in calving and are therefore not suitable for breeding purposes, and others more or less deteriorated; all these cows in ordinary times would be slaughtered for meat, and there is no reason against this at present.

The number of calves had diminished by 5.22 % that is from 4,869,710 to 4,615,500. This is a diminution of 254,210 head, which called forth energetic action on the part of the Government.

The preservation of cattle foods is necessary. For this purpose the Minister of Agriculture suppressed the duty on rice, oil-cake, etc. by a decree of August 13th.

The exportation of oil-cake and malt was forbidden by a decree of September 12th., as that of farinaceous cattle foods, hay, straw, and bran had been on July 31st. Furthermore, the Minister directed the agricultural services to point out to cultivators the advantage they might derive from these articles, and an active propaganda under the authorisation of the prefects was made in the various departments.

(2) *Sheep.* — The number of sheep is constantly diminishing, being reduced by 1,408,720; while there were 16,213,030 on December 31st., 1913 there are now no more than 14,804,310 remaining; that is to say there has been a decrease of 9.26 %.

(3) *Pigs*.—The number of 7,047,750 head of swine on December 31st., 1913 has been reduced to 6,233,735, showing an absolute decrease of 814,019 or 11.55 %.

#### § 4. UTILISATION OF BEET IN SUGAR FACTORIES AND DISTILLERIES.

The cultivation of beet for sugar factories and for distilleries is too intimately connected with beet cultivation in general, and consequently with the agricultural prosperity of the north of France to be overlooked by the Minister of Agriculture.

The crop seemed to be very promising and an exceptional return of about 900,000 tons was anticipated, but the greater part of the beet-growing district was invaded. In the meantime it was necessary to keep at work those factories not occupied by the enemy.

On the 15th. of September the Minister of Agriculture informed the Minister of War of the advantage there would be in keeping them working. Among the measures for this purpose it was considered essential that those technical employees indispensable for the work should be allowed a delay before joining the army, or that those who had already joined their regiments should be temporarily sent back. The Minister of War granted the delay with possibility of renewal in the case of privates of the territorial regiments and reserves of the same class not forming part of a fighting force.

These regulations were made known to the prefects, directors of agricultural associations, presidents of syndicates of sugar-makers and the agricultural distilling syndicate. Manufacturers have been thus enabled to address demands for delay or leave of absence directly to the Minister of Agriculture, which after examination are transmitted to the Minister of War.

As it appeared probable that difficulties would arise between the beet growers and sugar-makers, they were called together on December 17th. at the Department of Agriculture. After a discussion on the special conditions of the country those interested agreed that the price of beet should be dependent on the current price of sugar. In determining this price as far as possible, the commission, leaving a needful margin for variation, adopted the following decisions:

(1) A minimum price of 20 francs, or of 23 francs per ton for beet of 7 % density, with the usual increase to be allowed for every tenth over and above.

(2) The division in equal shares of the increase in the price of sugar above 35 francs or 38 francs.

The number of sugar factories at work rose to 68; and their total minimum produce was estimated at 325,797 tons.

The administration has also been careful of the safety of these sugar factories and has advised those interested of the best markets for the disposal of their goods.



## § 5. CULTIVATION OF FORESTS.

At the beginning of the war, instructions were sent to the Commissioners of Woods and Forests to retard the grant of contracts for the cutting of timber which were to be given in September and early in October in 1914 in connection with forests belonging to the State, to communes and to public institutions.

This measure was necessary partly because of the mobilisation of a great number of those employed in the forests and of dealers in wood, wood-cutters, carters etc. and partly because of the disturbance in trade and in the money market.

But, the war continuing, it was found impossible, without much inconvenience, to suspend everywhere and by a general order, all cutting of timber in the state forests.

As soon therefore as it was possible to re-organise the service, all the wood which seemed required for the necessities of the moment or the near future was offered for sale in those districts where it seemed that there would be a sufficiency of buyers, ready money and labour.

Thus in many places all the wood suitable for fuel has been or will be offered for sale, and the work in connection with the greater part of it is now going on.

But it was impossible to effect these sales under the usual conditions. It was necessary, according to circumstances, either to make them on the spot, because of the difficulty of communication and the small importance of the sale, or to centralise the business. With this view a Decree was passed on October 30th., 1914, authorising the sale in the chief town of any commune near the forests, of wood cut in 1914, and a Ministerial decision gave permission to sell all the wood cut in the same department in one of the chief places of an "arrondissement" and especially in the chief town of the department. It may be added that in those places where it seemed impossible to effect sales and where a supply of wood was required, nothing could be done but trust to chance or have recourse to the excise or to the employment of soldiers.

The sales effected have given satisfactory results to the State and to the communes that are proprietors. This success has been attained through the necessities of the War Department and because many private individuals were unable to sell their timber. Another cause may be found in the liberal provisions of the Decree of September 20th. with regard to the postponement of the date of payment for timber belonging to the State, to departments, to communes and to public institutions, sold before the war.

By the terms of this Decree, proposed by the Ministers of Agriculture and Finance, delay of payment was granted to the purchasers, to terminate three months after the cessation of hostilities, with the proviso that those who benefit by the delay should pay interest at 4 % from the time the debt

falls due till the date of payment. It was specified that notwithstanding this delay of payment, the security should remain unchanged without the need of any notification or of any act. But those purchasers, who, having suffered through events beyond their control, were incapacitated from payment, might apply for a delay with payment of interest. The Minister of Finance, in agreement with the Minister of Agriculture, will decide in regard to these requests.

These measures have been necessary because of the great disturbance caused by the war in the cultivation of forests and the timber trade; the sudden mobilisation of the woodcutters and of the carters employed for delivery of the wood, hindrances to transport by rail or boat, the mobilisation of a large number of merchants and cultivators of forests, the impossibility, owing to the moratorium, for the cultivators not mobilised of exacting payment from those cultivators or merchants mobilised or from any other debtor, and the greater impossibility of doing so in districts temporarily invaded or still occupied.

#### § 6. HYDRAULIC AND AGRICULTURAL IMPROVEMENTS.

At the beginning of the war, the Minister of Agriculture endeavoured to reduce as far as possible the cost of the services of hydraulic and agricultural improvements.

With the view of reserving for the Treasury the maximum amount of funds for the national defence, researches at the expense of the State have been generally suspended. No grants are made and the payment of sums previously allotted has been deferred.

There has been no departure from this rule unless in exceptional circumstances, for instance in the case of enterprises connected with the national defence or public safety, for the continuation of work the interruption of which would have rendered previous sacrifices useless, or in order to enable the recipient of the grant to pay workmen or tradesmen employed by him in such work, or when it was necessary to employ prisoners of war or men out of work.

In fact, from the month of October, the Minister of Agriculture was employing prisoners of war where men out of work were not available, in carrying out works of general or collective necessity in his department.

The French Government had in time of peace turned its attention to the regulation of the position of prisoners of war. On March 21st., 1893, the War Minister issued instructions on this point, which were modified on October 25th., 1914.

The utilisation of the labour of prisoners of war is regulated by a Decree of December 2nd., 1910 as to the laws and customs of land warfare which formed a rider to the International Convention signed at the Hague on October 18th., 1907. According to Art. 6 of this Decree, "The State may employ as workmen prisoners of war according to their rank and their

abilities, with the exception of officers; the work must not be excessive, and must have no connection with the operations of war.

Prisoners may be authorised to work for public administrations or private individuals, or on their own account.

Work done for the State must be paid according to the existing tariffs for soldiers of the national army doing the same work, or according to a tariff in relation to the work done.

When the work is done for other public administrations or for private individuals the terms must be arranged with the military authorities.

The wages of the prisoners will contribute to ameliorate their condition, and the surplus will be paid to them at the time of their liberation, deduction having been made for the cost of maintenance."

In order to decentralise, and to encourage the employment of prisoners of war, the War Minister authorised the generals in command of districts to decide as to requests for prisoners' labour, after consultation with the prefects of the departments in question.

M. Fernand David, Minister of Agriculture, who had proposed in the Chamber of Deputies the law of December 15th., 1911 with regard to land reclamation on the east coast of Corsica, believed that this vast undertaking was one in which prisoners of war might be with advantage employed. This work, to be carried out by the State, at a cost estimated at not less than 11,500,000 francs, is intended to improve the east coast of the island, now barren. It includes works for the supply of drinking water, drainage, land reclamation, and regulations of the mouths of rivers. The work, in full activity at the opening of hostilities, was suddenly interrupted by the mobilisation. But through the employment of prisoners, to the number of about 3,000, it may be resumed and carried on with all desirable expedition.

There are in Corsica other works in which prisoners of war may be employed.

The national domain of Casabianda, an old penitentiary long unused, was in 1894 placed under the direction of the chief engineer of the hydraulic service. Works of great importance for the regulation of the water supply have since been carried out, owing to which the domain, formerly a heavy burden to the State is now profitable, but the funds at the disposal of the Department of Agriculture have not as yet permitted the realisation of all the schemes for improvement without which the land cannot yield its full amount of profit. Prisoners of war, to the number of 1,000, are employed in supplementary works which will probably largely increase the value and the yield of the domain.

Similar works will be performed by prisoners of war in the national domain at Chiavari (Cosirca). It is proposed to erect boundary walls, to improve forest roads, to make reservoirs and canals for drainage purposes and lastly to renew the plantations of cork-trees.

The number of prisoners to be employed on these works would be about 200.

In the same department, with a view to agricultural improvement, and with the support of syndicates of the proprietors interested, yards are being got ready with the labour of about 200 prisoners of war, and farm roads constructed by them to facilitate access to the landed estates in the neighbourhood and consequently to increase largely the agricultural wealth of the district.

The Department of Agriculture is endeavouring to utilise the labour of prisoners of war in other departments.

In Puy-de-Dôme, in the Limagne in Auvergne, works of land reclamation are in progress under the direction of the Agricultural Improvements Service. The object is to drain marshy land about 6,000 hectares in extent thus increasing considerably its agricultural value. These works were to be carried out by various syndicates with the aid of grants from the Department of Agriculture. They were interrupted by the war, but, considering their great utility, the Minister of Agriculture went to make investigations on the spot in regard to the means of resuming them in spite of the difficulties under existing circumstances. He then decided, in accordance with the military authorities, that the work should be continued with the help of the labour of prisoners of war. One hundred and fifty prisoners have already been placed at the disposal of the syndicates and the work is progressing under the direction of the engineers of the Agricultural Improvements Service. New yards will probably be opened soon in which 300 prisoners may be employed.

In Bretagne, in consequence of the desire expressed by those departments which voted funds for the extension of the rural system of roads, yards have been arranged by 900 prisoners of war for the construction or repair of roads in fifteen communes of the Côtes-du-Nord and two communes of Ille-et-Vilaine. In twelve other communes of Côtes-du-Nord and Morbihan new yards have been opened for similar objects, and in these about 1,050 prisoners will be employed.

In Ardèche 100 prisoners are employed in works of agricultural improvement in the commune of Labeaume.

We may also state that in Hérault, near Montpellier, on the domain of Mas-des-Abbés, a building for the use of the district meteorological station in connection with agriculture is in course of construction by the labour of some twenty prisoners of war. Among them are skilled builders successfully directing the work, which otherwise perhaps could not now have been accomplished owing to the mobilisation.

The efforts of the Minister of Agriculture will not be confined to the above mentioned works. The Hydraulic and Agricultural Improvement Services have been requested to search for any undertakings which can be carried out by the labour of prisoners of war. It is proposed to construct country roads in the central plateau of France, especially in the department of Creuse where funds have been granted for the purpose. These works, which like those of land reclamation consist chiefly in embankments, are among those which may be entrusted to prisoners of war. It is easy to foresee the advantages, especially to poor districts, which may accrue

from works which facilitate communication and increase the productivity of the land.

It was hoped that prisoners of war might be at once employed in the realisation of a vast project long desired by proprietors of the Camargue, viz. the regulation of the outflow of the waters of the delta of the Rhone by improvements at the pool of Valcarès, but the solution of this question raises very serious difficulties. The Administration however, does not lose sight of the question, and every effort will be made to solve it should circumstances permit.

Lastly, the Minister of Agriculture is studying the possibility of restoring rural buildings destroyed or damaged by the war.

#### § 7. PREPARATION FOR FUTURE HARVESTS.

*Autumn Sowing.* — At the beginning of the war the Minister of Agriculture turned his attention to the autumn sowing, so that France in 1915 might not suffer from a scarcity of corn.

It was necessary to obtain from the Minister of War a better arrangement of the requisitioning of horses, and leave of absence for the territorial troops who were sent home for 15 days, with the obligation of assisting in the work of sowing.

As for all other measures the two Ministerial Departments easily arrived at an understanding.

The Minister of Agriculture in a circular sent through the prefects to the directors of agricultural services, dated October 24th., announced the decision of the Minister of War and explained the conditions under which leave of absence for sowing might be obtained.

He insisted on the necessity of ensuring that the men sent home (proprietors, farmers, metayers, servants and farm labourers) should exert all their energies to prepare and sow the ground.

The Minister added that those who had so little land of their own that their work could be finished in a few days should employ the rest of their leave in assisting other cultivators, more especially working on the land of those who were mobilised and were unable to obtain leave of absence.

He requested the mayors to assist in the good organisation of the work, and wherever possible to arrange collective labour.

He called the attention of the mayors to their responsibility in giving certificates in regard to the circumstances of the cultivator in support of his request for leave of absence. The mayors were also charged to see that each man returned to his post at the expiration of his leave of absence.

Lastly, the Minister requested a report on the result of these measures.

In a Circular of October 17th., addressed to the prefects, the Minister gave technical instructions concerning sowing to the directors of agricultural departments. In another letter of October 28th., he called the at-

tion of the prefects to a decree of the Prefect of Côte-d'Or regulating the more urgent agricultural labours.

In spite of some mistakes in the arrangements for leave of absence, the sowing has been accomplished owing to the above regulations, under better conditions than could have been expected. The land sown with winter corn is from 80 to 95 % of the usual amount devoted to this crop.

The area not sown in 1914 may be sown in the following spring, and plans have been made for doing so, in agreement with the War Department.

*Spring sowing.* — Spring this year is of great interest and of special importance; the country needs the whole produce of its soil, and the area to be sown is increased by the amount not utilised for the autumn sowing. This space must be devoted to spring corn and oats.

In general the Minister of Agriculture has endeavoured to supply the deficiency of labour by obtaining from the Minister of War leave of absence for men to do the spring sowing, and he is also seeking to provide for the cultivation of the districts devastated by the war.

It must be observed that in the east of France the farmers belonging to villages ruined and burnt have nearly all returned to their land, hoping to begin the spring work. But they have neither horses, implements, seed, manure, nor cattle food and very few are in a position to buy what they need without help from the authorities.

The Minister of Agriculture has succeeded in obtaining advances to farmers who are victims of the war to enable them to procure the above mentioned necessities, so that in the interest of the nation the soil may not lie fallow, and officials have been sent to ascertain the real and immediate necessities of the population. Thus through the intervention of the Government it is hoped that none of the land devoted to agriculture will be neglected.

The Minister of Agriculture has also obtained from the War Minister leave of absence for territorials for sowing, pruning vines and other spring work. Details published in the *Journal Officiel* for February 3rd., 1915 and a Circular issued by the Minister of Agriculture to the prefects define the conditions under which such leave of absence may be granted from February 5th. to April 5th.

## RUSSIA.

### THE ECONOMIC RESULTS OF HOME COLONISATION IN SIBERIA.

#### § I. IMPORTANCE OF THE SUBJECT.

For a general appreciation of the results obtained by home colonisation in Transuralian Russia, as undertaken by the Government in connection with the great land reform initiated in 1906, a general answer to the following principal questions might suffice :

1. Has this colonisation benefited the State?

2. Has it benefited the colonists themselves, and in what degree?

Even confining our examination to the strictly economic point of view, the first of the two questions is too complex, and the work of State colonisation too recently commenced for even an approximate answer. Very detailed statistics, it is true, show us that between 1906 and 1911, for example, the Government spent a total amount of 115,000,000 roubles (305,000,000 francs) on the home colonisation of the Transuralian provinces. We know also that this enormous expenditure has allowed of the establishment in Siberia of 417,000 families of colonists. Mathematically, we may therefore conclude that the establishment of each family cost the Government on an average 157 roubles (417.60 francs). But if, on the one hand, it would be evidently absurd to consider these 157 roubles per family as so much lost for the State, on the other hand, it is no less quite impossible, at least under existing circumstances, even approximately to estimate what part of this "loss" we may consider as compensated by the general increase in value of the countries colonised and the increased revenue the State derives from them.

In other words, any conclusion in regard to the results obtained by the colonisation of Siberia, from the point of view of the economic interests of the State could at present only be premature and very uncertain.

The second question, regarding the greater or less economic advantage derived by the colonists themselves from their emigration to these provinces, is fortunately easier to consider, at least so far as Siberia proper is concerned, the largest and most important of all the regions making part of the immense Transuralian area now being colonised. In fact, we have at our disposal the results of an enquiry, carried out by order of the Russian Govern-

ment, in the course of the years 1911 and 1912, into the material conditions of the life of the colonists (1).

## § 2. GOVERNMENT ENQUIRY INTO THE ECONOMIC CONDITIONS OF THE LIFE OF THE COLONISTS IN SIBERIA.

The enquiry in question was not extended, to all the families of colonists established in Siberia — that would have been equally impracticable and useless (2) — but to a number of entire colonies, more than sufficient for the purpose, recognised as forming so many "typical cases", both in respect to their geographical situation and their degree of development in an agricultural or educational sense.

First of all, the whole country was divided into four regions differing in regard to their climate, and the nature of the their soil and vegetation, that is to say:

- I. The fertile wooded plain of West Siberia,
- II. The immense Southern Steppe, almost entirely without forests,
- III. The richly wooded Eastern districts, — and lastly,
- IV. The uncultivated "taiga" of the Northern districts (3).

In each of these regions, a certain number of entire colonies were studied, carefully selected, as typical examples of the most various conditions: some long established, others recently founded, some populous, occupying a large area, others with few members and poor, some in the immediate neighbourhood of the lines of communication, others lost in vast deserts, some already arrived at a considerable degree of agricultural, commercial, industrial and educational development, others, on the contrary, but little developed in these respects. In one word, an effort was made not to overlook any of the extremely various kinds of centres of colonisation in the country.

In each of these specimen colonies, a detailed study was made of all the families composing it at three successive periods of their existence.

In the first place attempt was made to ascertain as accurately as possible the economic circumstances of each family in its place of origin, before it emigrated. In the second place, calculation was made in the case of each family of the result of the various operations necessitated by its decision to establish itself in Siberia: the sale of its personal and real estate in Europe, the despatch of "chodoks" (4), the journey to Asia, carriage etc.;

(1) Сборник статистических сведений об экономическом положении переселенцев в Сибири. (Collection of Statistics relating to the Economic Situation of the Colonists in Siberia). IV Volumes Published, Petrograd, 1912.

(2) Between 1896 and 1913, the total number of the emigrants from the European Provinces of Russia to Siberia, was, in round numbers, 4,800,000.

(3) In this article and in the tables included in it, we shall indicate these four regions by the four numbers, in Roman figures, given above.

(4) In regard to the "chodoks", and their rôle, see the article "Home Colonisation in Siberia in 1913", in the number of this Bulletin for March, 1915, (pp. 111 et seq.).



so as to arrive at as accurate as possible an estimate of the possessions of each family (in money, implements, livestock etc.) at the date of its establishment in the colony selected. Thirdly and lastly, the situation resulting from the emigration, the economic circumstances of everyone in the new home at the moment of the enquiry, the changes for better or worse made in them by the length of sojourn in Siberia and the consequent improvement of the new farms.

In the present sketch, based principally on a very remarkable study by M. W. Kuznetzow, published in the number of the "Messenger Européen" (1) for November last, we shall proceed in accordance with a method similar to that indicated above.

In order better to show the importance and the value of the enquiry carried out by order of the Russian Government, we shall, however, again note that it extended altogether to 447 colonies, including in all 31,984 families, distributed as follows among the four regions mentioned above.

I. Western Plain . . . . .	78 colonies with	9,036 families
II. Southern Steppe . . . . .	72 " " "	9,329 "
III. Eastern Forest Steppe . . . . .	133 " " "	8,197 "
IV. Northern "Taiga" Districts. . . . .	164 " " "	5,422 "
<hr/>		
Total . . . . .	447 colonies with	31,984 " (2)

### § 3. ECONOMIC CIRCUMSTANCES OF THE COLONISTS BEFORE EMIGRATION.

In the case of 21,800 families of settlers in Siberia, it has been possible to obtain accurate and reliable statistics of their economic circumstances in their native communes directly from the localities in which they were first established. Of these families, 17,001, or 78 %, before their emigration were in possession of farms. The remaining 4,799 (22 %), in Russia in Europe, had belonged to the class of peasants without land.

The total area of the land held by these 17,001 families of former land holders was 99,127 deciatines (3), 89,787 deciatines being "nadiel" land (4) and the rest, 9,430 deciatines, land purchased after emancipation. This will give an area of 4.5 deciatines per family.

(1) В. Кузнецовъ (W. Kuznetzow): Экономическое положеніе переселенцевъ въ Сибиріи (*The Economic Situation of the Colonists in Siberia*) in the number of Вѣстникъ. Евразіа for last November (pp. 317 et seq.).

(2) We shall see hereafter (§ 7) that the total number of inhabitants of these colonies was at the date of the enquiry 178,504.

(3) The Russian deciatine is equal to 1.09250 ha.

(4) For the meaning of this expression, see the article, "General Outline of the New Russian Land Reforms", in the numbers of this Bulletin for November, 1913 and January, 1914.

Let us note that this is the average for the whole area of the land formerly held by the colonists. The area suitable for farming was only 72,390 deciatines of arable and 1,330 deciatines of grazing ground, or altogether 13,720 deciatines capable of cultivation. On an average, then, we have per family, 3.9 deciatines of farm land, 3.3 arable and 0.6 grazing ground.

And the part of this area actually farmed was even less; owing to the methods of farming in use among the Russian peasants, it was only 53,288 deciatines, or 73.6 % of the total area of the holdings, giving an average of together 2.4 deciatines of land farmed per family.

Considering the method of farming of the Russian peasant and the average yield of farms in Russia (1), these 2.4 deciatines actually farmed could only represent a gross yield of about 100 "poues" (2) (1,650 kg.) of wheat at most, however the farmer exerted himself.

Now it is quite evident that so small a yield is quite insufficient. However modest the requirements of the Russian peasant are, on 100 poues of wheat a year he cannot feed his family, keep his livestock, sow his fields, pay the taxes and satisfy all the other needs of his daily life.

A calculation on quite other lines confirms the above conclusions in very detail. Taking account of the value of the land and the stock sold on account of the projected emigration, of the goods left unsold in the native place and those the colonists take away with them, the Government enquiry was able to ascertain that the average amount of property of all kinds (land, houses, livestock, implements, money etc.) possessed by the 21,800 families of colonists examined, before their emigration, did not exceed 397 roubles (1,056 frs.) per family. Evidently a family could not live on the revenue derived from so small a capital.

And so we can not avoid the conclusion that, however important may be the rôle of circumstances not directly economic in deciding the colonists to emigrate to Siberia, it is none the less indisputable that the principal reason that urges them is poverty of the extremest sort, the material impossibility of existence in Russia in Europe and the hope of finding conditions more favourable in the remote and mysterious Siberia, a less gloomy future and the possibility of creating for themselves an existence economically happier and socially more independent.

Before investigating how far these hopes are realised by emigration to Asia, let us stop to consider the expenditure necessitated by the transfer of residence from the old to the new home.

#### § 4. REMOVAL TO SIBERIA AND ITS IMMEDIATE CONSEQUENCES.

The study of the immediate economic consequences of removal from Europe to Asia is complicated by the fact that all the colonists do not belong

(1) См. СБОРНИКЪ СТАТИСТИКО-ЭКОНОМИЧЕСКИХЪ СВЕДѢНІЙ ПО СЕЛЬСКОМУ ХОЗЯЙСТВУ (Collection of Statistical and Economic Data in connection with Agricultural Industry in Russia). Yearbook published by the General Management of Agriculture and Agrarian Organisation.

(2) The Russian poue of 40 pounds weighs 16,38046 kg.

to the same class of regular emigrants, that is to say, to the class of those who conform to the rules laid down by the State (1).

These rules, the observance of which alone assures the colonists of the support of the authorities and of important economic facilities, provide that the would be colonist must, in the first place, assure himself through the medium of a "chodok" of a lot in conformity with his desires and requirements. It is only after such a lot has been assigned to him, that he must at his ease and without hurrying himself settle his affairs in his original home and, then, betake himself directly to the place of his new residence, benefiting by the special tariffs to which he is entitled, and begin to farm the land secured by him in anticipation.

Although it is evident that this method of proceeding, assuring the colonists of the uninterrupted support of institutions specially founded for the purpose, is the only safeguard against unreflecting action and disappointment, many emigrants, all the same, prefer to follow their own ideas, without consulting the experienced, or the authorities and consequently do not receive from the latter the protection and the favours reserved for the regular emigrants. These independent settlers generally sell their land in Europe for what they can get, leave for Siberia on chance, with no plan made in advance, and, once arrived, generally in districts where all the lots for colonists are already occupied, endeavour to gain a livelihood in some way or other, until they succeed in finding unoccupied lots in a colony where they are acceptable.

In the course of their wanderings, sometimes prolonged for entire years, the funds realised at the moment of leaving Russia in Europe increase and diminish in a manner quite impossible to foresee, since it depends on the chances of a life of adventure and as the number of these independent colonists is very considerable — more than 13 % of the 21,800 families comprehended in the enquiry — in the statistics of the economic operations immediately connected with the removal to Asia there is a regrettable uncertainty in regard to the figures for the whole number of emigrants, which is unfortunately not to be remedied.

So much said, let us now consider the statistics.

The sale of the farms previously possessed in the provinces of Russia in Europe by the 21,800 families considered in the Government Enquiry brought in a total amount of 2,400,000 roubles. The sale of the buildings and live and dead stock belonging to these farms brought in 6,397,401 roubles. We must add to this an amount of 998,663 roubles, representing the estimated value of the farms the emigrants had not succeeded in selling at the date of their departure for Asia, as well as another amount of 2,123,206 roubles, representing that of the live and dead stock taken with them and we shall get for the total value of all the assets of these families

(1) In regard to the rules for official, that is to say, State aided emigration, see the article already mentioned, "Home Colonisation in Siberia in 1913" published in the number of this Bulletin for March, 1915.

at the date of removal an amount of 11,919,270 roubles. If we now deduct from this total the amount of the debts, of the arrears of taxation as well as of other liabilities of the same kind, it follows that the total assets of these 21,800 families, at date of removal of each for Siberia, may be calculated at 8,650,012 roubles.

The total assets of these families, when those of each are calculated not immediately on arrival at its destination but at the moment of its definite establishment and resumption of agricultural work in Siberia, will be reduced as follows: cash, 2,463,294 roubles, live and dead stock, 2,123,206 roubles, total 4,586,500 roubles, to which must be added 998,663 roubles, representing land not yet sold in the European provinces of the Empire. Altogether we arrive at the total amount of 5,585,163 roubles.

Finally, deducting this total from that previously given, we find that the general decrease in the assets due to the removal of colonists from Europe to Asia is 3,064,849 roubles (8,650,012 - 5,585,163) or 35% of the total amount possessed by the colonists when they left Russia in Europe. This decrease, comparatively very considerable, above all in consideration of the low rates for transport of emigrants, is largely due to the influence of the figures relating to the independent settlers mentioned above, who generally possess nothing at all when they finally succeed in definitely establishing themselves.

Calculating the averages per family from the above total figures, we get the following amounts:

Average amount of assets before emigration . . . . .	397	roubles
The same, less the value of the land . . . . .	241	"
Average assets of each family at date of establishment in Siberia . . . . .	203	"
This last sum is made up as follows:		
Cash . . . . .	90	roubles
Value of stock brought with them by the colonists . . . .	77	"
Value of land still unsold in Europe . . . . .	36	"
Total . . . . .	203	"

As the land still unsold in Europe is not an asset immediately realisable in money, it follows, that the average initial working capital possessed by each family of colonists on arrival at its destination is only  $90 + 77 = 167$  roubles.

This excessively small amount is fortunately added to by subsidies for initial establishment, granted by the Government, varying in amount according to circumstances, but of an average that may be estimated at 66 roubles per family. Added to the above amount, this gives 263 roubles for the total initial working capital of each family.

When the value of the land is deducted, this amount exceeds by 23 roubles that possessed by these same families before their removal to Siberia (See above). As regards the stock brought by the emigrants, it includes on an

average 1.6 head of livestock (horse, ox or cow) and one agricultural machine or vehicle for each family. The decrease in the amount of stock implied by these figures when we compare the amount possessed by each family before and after emigration is nearly compensated by the corresponding increase in the amount of money owned by each colonist.

To sum up then, the Government enquiry enables us to see that, when we leave out of consideration the value of the land the colonists have at their disposal before and after emigration, their general economic position is, at the moment of their resumption of agricultural work in the new country, almost the same as it was before they left the old. This is due in the first place to subsidies for first establishment granted by the State, in compensation for losses incurred by removal to Asia, and reduces the whole problem we are here endeavouring to solve to a comparison of the area, the comparative value and yield of the land owned by each family of colonists before and after emigration.

We shall now proceed to consider these points.

#### § 5. ECONOMIC DEVELOPMENT OF THE COLONIES IN SIBERIA.

We saw above that the total area possessed by each of these families before emigration was, on an average, 4.5 deciatines. In each of the four regions into which we have divided Siberia (§ 2), this average is different: in the first, it is 3.6 deciatines, in the second 5.0, in the third 4.8 and, lastly, in the fourth 4.9. The regular distribution, by regions, of the colonists in the new country, in accordance with their economic circumstances in the old, is explained by the fact that each of them generally tries to choose his new holding in a region as far as possible resembling his native district in climate, and agricultural and other conditions. The first region of Siberia, for example, will above all attract emigrants from the rich provinces of South Russia, where the holdings are very small in area. The fourth region, on the contrary, will principally attract emigrants from the forest provinces of the North, where, naturally, the holdings are larger.

Let us now see what are the circumstances of all these colonists after their arrival in Siberia.

Formerly, the area of the colonisation holding was calculated in every district of Siberia at 15 deciatines per "soul", that is to say per adult male member capable of work in each family (1). A few years ago, the Government introduced a change in this matter, which was both just and reasonable and regulated the area of the lots in accordance with the approximate value of the land. The former average

(1) In order to avoid confusion, when we use the word "soul" in this special Russian sense, we shall place it in inverted commas. Without inverted commas, the word will be used in its ordinary sense.

of 15 deciatines was reduced to 12, 10 or even 8 in the richer districts and in those preferable on other grounds. In consequence, the area of the colonisation lots granted to each family of colonists varies as shown in the following table, in which we also show the area of the land formerly possessed in Russia in Europe, the average per "soul" on which the area of the family holdings is based, the number of "souls" per family, according to the statistics collected by means of the enquiry of 1911-1912, and finally the average area, per region, of the colonisation lots of each family.

TABLE I. — *Area of Land Possessed by Colonists Before and After Emigration.*

Regions	Area Possessed in Deciatines				Increase as Multi- ple of the Area Possessed in Europe
	by Families Before Emigration	After Emigration, in Siberia			
		by "Souls"	Average Number of "Souls" per Family	by Families	
I. (West Plain) . . . . .	3.6	14.5	2.43	35.3	9.8
II. (South Steppe) . . . . .	5.0	14.9	2.70	39.9	8.0
III. (East Steppe) . . . . .	4.8	15.0	2.66	40.0	8.3
IV. (North Taiga) . . . . .	4.9	15.0	2.50	37.5	7.7
Average for the Whole of Siberia.	4.5	14.4	2.59	38.3	8.6

We see, then, that the first effectual result of emigration to Siberia is that each family of colonists obtains an area on an average *nine times* *per thou* it had in its original home.

Let us observe in this connection that the figures showing the area of the holdings possessed *before* emigration include waste land, whilst, on the contrary, those showing the areas granted to the colonists include only land considered as more or less adapted for farming. In order to arrive at the total area of the colonisation lots, we must add about 3.2 deciatines of land not adapted to farming per "soul", which would give far higher figures for the increased areas than those shown in the last column of the table.

Let us now see to what extent the colonists profit by the advantages offered them by this enormous increase in the area at their disposal.

The first year of residence in Siberia is naturally the hardest of all. The newly arrived colonist has to establish himself, to erect the buildings absolutely necessary to lodge him and shelter his livestock during the winter, to clear, and sow an area large enough to assure him in the summer of a harvest sufficient for his needs; he must enclose grazing grounds for his livestock,

cut the hay he requires for winter, provide himself with fuel etc. In one word he has to do every thing at once.

The local conditions, above all the wealth of forest, of course are of very great importance for him under these circumstances; naturally, indeed, the colonist, who, in order to have a field or grazing ground, has first to clear all the land required, will not obtain the same results as one who finds the land prepared for him. In fact, the Government Enquiry ascertained that the areas brought into working condition, whether as fields or grazing grounds, the first year were:

	Deciatines
In the fertile plain of the West (Ist. region) . . . . .	2.8
" Southern Steppes, without forests (IIrd. region) . . . .	2.2
" rich forest steppes of the East (IIIrd. region) . . . .	1.9
" Northern " Taiga " (IVth. region) . . . . .	0.7

These results are very remarkable. They show us in fact that in districts where colonisation is not at the start impeded by too luxurious forest growth, in the Western plain and the Southern steppes, for example the area the newly arrived colonists succeed in bringing under cultivation in the *first year* of their installation is equal to or larger than the average area really cultivated by them in their native provinces. Indeed, we have seen above (§ 2) that the average of the latter area was, taking all the emigrants into consideration, only 2.4 deciatines.

In other words in his first year of residence in Siberia, the colonist established in the two regions in which there are no forests, from a strictly agricultural point of view, is under economic conditions in no way inferior to those under which he lived in Europe, with this essential difference, however, that in Siberia the abundant land at his disposal offers him possibilities of development he did not possess in Europe. With regard to the colonists established in the forest regions, it must not be forgotten that the decrease in the agricultural yield properly speaking, indicated by the above figures for the first year of residence in Siberia, is, at least in part, made up by the yield of the forests from which they are of necessity compelled to reclaim the land to be farmed (1).

Altogether, therefore, perhaps the colonist will find his life in Siberia during the first year harder still than in his native province, but, as we shall see, this hard beginning is amply and rapidly compensated by the results of the ensuing years of colonial farming.

For the study of the further development of the Siberian farms, the holdings were divided, for purposes of the enquiry, into five classes

(1) The Government, which had already previously facilitated the deforestation of regions too rich in forests, by acting as intermediary for the colonists in selling the forest produce, in 1912 instituted a special credit for clearing the "taiga" before cultivation, by which the colonists there receive 143 roubles per deciatine occupied.

the first including all those regularly worked for a period of less than three years, the second those worked for full three years, the third and fourth those worked for from four to seven and from eight to eighteen respectively, the fifth those worked for nineteen years or more.

The following table gives, for each class and in each region into which the country was divided, the average area farmed by a family, whether arable or pasture land. For the sake of comparison we give the corresponding figures in regard to the areas worked by the independent settlers mentioned above, or at least by those who, until they can succeed in obtaining a holding of their own, attempt to make a living by cultivating land on lease. It has not been thought necessary to classify these latter farms according to the period they have been worked.

TABLE II. — *Progressive Development of the Farms Worked by Colonists in Siberia:*

Farms worked for a Period of	Average area, Farmed by a Family in each Region (in Decistines)											
	Arable Land (1)				Pasture Land				Total			
	Regions				Regions				Regions			
	I	II	III	IV	I	II	III	IV	I	II	III	IV
Less than 3 Years.	4.4	3.5	2.2	1.4	8.0	4.1	4.7	2.7	12.4	7.6	6.9	4.1
3 Years . . . .	7.3	4.9	3.0	1.8	9.5	5.4	5.0	3.1	17.8	10.3	8.0	4.9
Between 4 and 7 Years . . . .	8.7	5.6	3.8	2.3	11.1	4.9	4.8	3.4	19.8	10.5	8.6	5.7
Between 8 and 18 Years . . . .	9.8	8.5	5.9	3.2	7.5	7.0	6.2	6.2	17.3	13.5	12.1	9.4
19 Years and More	8.0	7.7	3.9	1.5	10.3	4.2	9.4	5.6	18.3	11.9	12.3	7.1
Farms Worked by Independent Settlers . . . .	2.6	2.0	0.4	0.3	2.5	7.6	0.6	0.9	5.1	3.6	1.0	1.2

(1) These figures only refer to areas sown, not to fallow land, gardens and areas otherwise farmed.

Let us here observe that in view of the relatively recent date of the systematic organisation of emigration to Siberia, and, above all of that till more recent, of the State organization of this emigration, the farms longest worked, that is to say, those the farming of which began and continued for a several years without the assistance of the colonisation institutions afterwards founded, naturally compare unfavourably with those the whole working of which has been carried on under the auspices of the



State. To this circumstance among others must be attributed the apparent decrease in cultivated areas for the older farms (1). In fact, there is no question of a real decrease in the cultivated area belonging to a certain category, but we have here two different classes of farms, one encouraged from the start by the State, the other abandoned to itself during the first and most difficult years. Let us add that the number of the latter farms is very small; it represents in fact only 3.8 % of the total number to which the enquiry extended.

It was found also that the development of the colonial farms continues far beyond the period shown in this table. In a quite general sense, it may be admitted that this development only reaches its maximum about the twenty fifth year.

The conclusions to be derived from the above table are as various as they are interesting. If, as we say above, the hard work of the first year just suffices to assure the colonists of an existence as wretched as they had in their native provinces, the work of the second year, on the contrary results in a very remarkable improvement of their circumstances. Even in the "taïga", where the exploitation of forests increases the results obtained by farming, the general economic circumstances of the colonists are thenceforward at least as good as those under which they lived in Europe. Everywhere else they are infinitely better. In the fertile Western plain, for example, where the yield of the soil is appreciably inferior to that of the European provinces of the Empire (2), it may be admitted that the annual revenue of the colonist is three times what it was only two years before in Europe.

This general improvement becomes more marked in the following years. From the third year we may say the economic position of the Siberian colonist is definitely assured. Our table shows us in fact that at that moment he has an average area of farmed land, varying from 8 to 18 deciatines per family, that is to say a farm the yield from which is quite sufficient for the requirements of ordinary life.

Here again we must make exception for the colonists established in the "taïga", who, as shown in the table, generally do not succeed in clearing the area they require before the end of the eighth or tenth year of their residence.

(1) We shall consider later on another reason not less important for these smaller figures the change from the system of the greatest extensive to that of intensive cultivation.

(2) See, for example, in respect to rye, the average annual yield in "poules" per deciatine in the above mentioned "Collection" of the General Department of Agriculture and Agrarian Organisation:

Years	in Europe	Prov. of Tobolsk
1909 . . . . .	51	38
1910 . . . . .	56	60
1911 . . . . .	48	45
1912 . . . . .	61	70
1913 . . . . .	58	57

ence in Siberia. But, we repeat once more, this exception is more apparent than real, as in their case the lesser yield from the purely agricultural crops is amply made up for, on the one hand, by the yield from the exploitation of the forests, and, on the other, by more effectual assistance from the State, which is especially interested in the colonisation of these countries (1).

One of the most important conclusions we may draw from our table is that of the really striking inferiority of the independent farms compared with those of the regular colonists. We know already the causes of this inferiority; let us therefore only add that the emigrants are fortunately now beginning to understand them and it is to this the continual and increasing diminution in numbers of the independent colonists is, in the first place, to be attributed (2).

Theoretically, the increase in the area of the available farms should have led to a corresponding increase in the number of head of livestock and of the farm implements possessed by the colonists. Practically, however, the increase in the stock has been incomparably superior to that of the area, as is seen in the following table, also taken from the report of the Government enquiry of the years 1911 and 1912.

TABLE III. — *Average Increase in the Stock of the Siberian Colonists.*

	Average Stock, per Family, Possessed		Percentage of Increase on the Stock Possessed on Arrival in Siberia
	On Arrival in Siberia	at Date of Government Enquiry 1911 1912	
Head of Livestock . . . . .	1.5	13.0	767 %
Implements and Machines (Exclusive of Sowers and Reapers) . . . . .	0.9	5.0	456 %
Sowers and Reapers' . . . . .	0.1	0.4	300 %

In themselves, the figures given in this table already show a remarkable improvement in the circumstances of the colonists. When compared with those in Table II, they serve admirably to complete the general idea given by that table of the total progress realised on the farms.

(1) When we consider the figures in Table VI, we shall find additional proof that the colonists of the "taiga" are in no way less fortunate in their lots, as regards the revenue to be derived from them, than their companions in regions better suited to agriculture, properly so called.

(2) In 1904 the independent colonists formed 92.7 % of the total number of emigrants to Siberia; in 1912 they formed 45.3 % and lastly in 1913 hardly 35 %.

With the fixed idea that all the troubles of his existence in Europe were due exclusively to the insufficient area of the land he had there, the first care the peasant has, on his arrival in Siberia, is to bring under cultivation the largest possible area. The figures in table II furnish irrefutable evidence of this. Experience, however, soon shows him that quantity is not everything and gradually we see him limiting his attention to the quality of the crops. His exaggerated desire for large areas diminishes; it at last almost entirely ceases, and the efforts of the colonist are thenceforth given to the increase, as we see in Table III, of his livestock and the improvement of his agricultural implements and so of his methods of cultivation.

#### § 6. ECONOMIC POSITION OF THE COLONISTS WHEN DEFINITELY ESTABLISHED.

The figures up to now given refer to the whole number of the 21,800 families of immigrants considered in the Government enquiry of 1911-1912, without regard to whether they were composed of colonists definitely established and already habituated to the quite special conditions of Siberian life, or still inexperienced beginners, or even of the class of independent settlers.

On account of circumstances different, it is true, but equivalent in their effects, these two latter classes, beginners and independent settlers, are, of course, in point of agricultural and economic activity far less competent than colonists already experienced, who have overcome the difficulties inevitably associated at first with a new installation in a new country. It would be, therefore, unfair, to allow the evidently inferior results of the work of these two classes to reduce our estimate of that done by the majority of experienced colonists. And the more so, as the inferiority of the beginners and independent settlers is only a transitory matter.

A comparison between the economic position of the Russian peasant before emigration and that of the Siberian colonist will only be fair and really conclusive if we count as Siberian colonists only those, whose farms have already attained their natural development, that is to say, when we eliminate from the statistical tables the figures relating not only to the independent settlers, but also those relating to the beginners, considering as such all colonists who have been farming for less than three years (1).

On the above grounds, the Government enquiry gave quite special importance to the comparative study of the general economic circumstances of the Russian peasant before emigration and those of the Siberian colonist definitely established beyond the Urals for at least three years. In this connection we reproduce the following table :

(1) We have just seen when considering the figures in Table II, that it is at the end of three years the economic position of the colonist may be considered as definitely assured.

TABLE IV. — *Comparative Area of Colonists' Farms Before and After Emigration to Siberia.*

	Area in Deciatines, per Family							
	of all the Farms Worked				of Land Sown		of Land Sown and Grazing Ground	
	in Siberia				in		in	
	Russia	First Year	1911-1912		Russia	In Siberia 1911-12	Russia	First Year 1911-1912
I. (Western Plain) . . .	3.7	6.8	21.2	2.6	8.8		2.9	6.8
II. (Southern Steppe) . .	4.0	6.1	18.8	2.7	6.8		3.0	6.1
III. (Eastern Steppe) . .	4.1	5.1	12.5	2.3	4.3		3.2	5.1
IV. (Taiga) . . . . .	4.2	1.6	9.4	2.0	2.6		2.1	1.6
All Siberia . . . . .	4.0	5.3	16.2	2.4	6.0		3.0	5.3
								12.5

In this table the difference between the general area farmed at different moments in the life of the colonists is shown with quite remarkable clearness. It is with the period of the peasants' life in the European provinces, before emigration that the minimum area of the various kinds of farm correspond, and, from the first year of their establishment in Asia, this minimum is left far behind in all the regions of Siberia, with the single exception of the "Taiga". At the date of the enquiry, that is to say when the farms considered had, on an average, been worked for eleven years, the average area cultivated with each kind of crop exceeded *at least three or four times* the areas so cultivated before emigration, even in so unfavourable a region as the Taiga.

We might, by a process similar to that we have just applied in regard to the area of the farms, establish a comparative table of the live and dead stock possessed by the colonists before and after emigration. But as we have not the space, we shall limit ourselves to indicating that the conclusions such a table would enable us to arrive at would be equally favourable to the results of emigration. Let us rather compare the total value of the assets of the colonists, exclusive of land, before emigration, at date of establishment in Siberia and at date of the Government enquiry.

The enquiry established that, before emigration, the capital in buildings, live and dead stock and the savings in money of all the colonists, in the class under consideration, amounted to a total of 3,933,300 roubles. At the date of establishment in Siberia, the value of these assets had decreased to 3,301,500 roubles. At the date of the Government enquiry they were valued at 10,121,900 roubles. And this sum did not include the savings in money belonging to the colonists, not taken into account by the enquiry.

From the above figures we see that by removal from Europe to Siberia, the total assets of the colonists here considered decreased by 631,800 roun-

bles or 16 %. This gives an average of 78 roubles per family. On the other hand, the profits obtained by the cultivation of colonial farms in Siberia up to the date of the enquiry of 1911-1912 were such as to increase the total capital possessed before emigration by 8,368,500 roubles (savings in money included). The increase was then 213 % on the capital possessed in Russia, and 272 % on that possessed at the moment of establishment in Siberia.

Distributed among the families considered, 16,487 before emigration, 20,456 at date of establishment in Siberia and 21,752 at date of the Government enquiry, these figures give the following results.

TABLE V. -- *Average Capital per Family at Various Dates.*

Before Emigration	•	239	roubles (varying from 196 to 295 roubles, according to region)									
On Arrival in Siberia		161	»	»	»	143	»	188	»	»	»	
In 1911-12	. . . .	461	»	»	»	241	»	665	»	»	»	

In other words, the value of the capital formed in Siberia exceeds that possessed in Europe before emigration by 227 roubles, or 95 % and that the colonists had when they began farming in Siberia by 305 roubles or 189 %.

We see these figures, above all the percentages, are less than those given above for the whole group of colonists considered. This is due to the different number of families taken into consideration at the three different dates considered. These apparently different results are, however, of very little importance; they may serve to elucidate different aspects of the problem; but in no way modify the substantial results. In spite of the very considerably larger number of the families considered at the later dates, the average level of material prosperity is none the less infinitely higher than before the emigration.

The possessions of each family of colonists, exclusive of land, are, on an average, nearly twice what they were in their original country. And if we could say above that in Siberia in Europe the colonist was indigent, it is no exaggeration to say that in Siberia he is well to do.

Let us add some details characterising the situation. Before emigration many colonists had no land, and, amongst those who had, many had not homes of their own. In the statistical return the total number of the first category is reckoned at 22 %, and that of the second at 15 %. Emigration has changed this deplorable state of things. In Siberia, every colonist, — of course we mean every regular colonist, — has land quite enough for his requirements. The Government enquiry only found three that had no homes of their own. And in all three cases the lack was merely due to the fact, that, though in course of construction, the houses were not yet finished.

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Up to the present we have been comparing the position of the colonists in Siberia, with their position before emigration. Now, as we know that their earlier situation was very unhappy and that the extremest misery was very often the cause of their emigration, our comparisons, however favourable they may be to the results of emigration, have still only a very relative value.

What is important and can alone provide a certain and safe basis for calculation is a comparison of the Siberian colonists' position, no longer with that of the minority of the Russian peasants whom misery forces to emigrate, but with the average position of the whole agricultural class in the European provinces of the Empire.

Owing to the considerable differences characterising the kind of life led by the peasants in regions differing so greatly in every respect as those of Russia in Europe and of Siberia, it is fair to institute comparisons between countries in European Russia and Siberia of more or less similar character. This is the more equitable, as we have seen above that the emigration is guided by a regard to these similarities, and the immense majority of the colonists of the "Taiga" for example, come from the forest provinces of the North, whilst those of the Southern steppes generally come from the Southern provinces resembling in their nature the first two regions into which we have subdivided Siberia.

On these considerations, the Government Enquiry made a comparison between the general conditions of the ordinary life of the colonists of the first and second region and the corresponding conditions of the peasants of the province of Voronezh. The position of the colonists of the third and fourth region was compared with that of those in the two provinces of Kaluga and Olonets. These provinces were chosen, in the first place, on account of the greater or less analogy they presented in their natural conditions with those of the corresponding regions of Siberia, in the second, in view of the special wealth of statistics in relation to the domestic economy of the rural classes in all three cases.

We summarise in the following table, reproduced from the article of M. Kuznetzow, the principal results of the above comparative study.

TABLE VI. — *Comparative Statistics of the Domestic Economy of the Siberian Colonist and the Russian Peasant.*

	Revenue and Expenditure per Individual, in Roubles		Buildings and Stock per Individual — (Number)			Annual Consumption, per Individual, in poudes				
						Vegetable Products		Animal Products		
	Revenue	Expenditure	Buildings	Livestock	Implements and Machinery	Grain	Total	Meat	Other Products	Total
Siberia; Regions I and II, . . . . .	89	75	0.5	2.6	1.0	15.2	21.5	1.0	6.4	27.9
Province of Voronezh	58	54	0.5	1.6	0.4	18.6	25.2	1.2	4.6	30.1
Siberia; Regions III and IV, . . . . .	76	65	0.6	2.2	0.9	13.1	27.7	1.1	9.5	37.2
Province of Kaluga .	54	58	0.6	2.1	0.8	13.8	27.2	1.2	5.7	32.9
Province of Olonets .	125	118	—	1.9	—	20.9	28.8	1.0	15.0	43.8

From this table we see that the value of the buildings, both dwelling houses and farm buildings, and of the live and dead stock of the individual colonist definitely established in any region of Siberia for at least three years exceeds that of the average individual peasant of Russia in Europe equally in the typically Northern province of Olonets, in the central province of Kaluga and in the southern province of Voronezh.

As regards the annual revenue and expenditure in money of each individual, the amount in the case of the Siberian colonist exceeds that of the peasant of the two provinces of Voronezh and Kaluga, but is appreciably inferior to that of the peasant of the province of Olonets. But it is well to observe in this connection that the latter amount is absolutely exceptional for Russia in Europe and that, consequently, also here, statistics show the position of the colonists as superior to that, of the average peasant.

Let us further observe that if we consider, not the actual amount of revenue and expenditure but the relative amount, that is to say the excess of the revenue over the expenditure, the difference in the position of the colonist and the peasant of the province of Olonets disappears and the advantage remains definitely with the colonist.

Let us observe in this connection, that the best financial result, an excess of 11 roubles in 76 roubles of revenue, or almost 15 %, is given by the IIIrd and IVth. regions of Siberia, those, that is to say, in which on account of the immense labour of deforestation necessary, the development of pure agricultural enterprise is least important. This serves to show, better than any long discussion could, how the difficulties met with in these regions

the establishment of agricultural colonies are compensated by the possibilities presented by other more lucrative undertakings.

In regard to food, finally, the difference, though not considerable, is still in favour of the colonist. In fact the decrease in the amount of vegetable produce consumed by the colonist is amply made up for by the corresponding increase in animal food. In the province of Olonets the extraordinary quantity of animal produce other than meat consumed shown in our table, is due to an exceptional consumption of milk in the region, which is eminently a dairy region. Now, we know that the dairy industry is just one of the most thriving in Siberia. It is therefore to be foreseen that, in a short time, the Siberian colonist will be on a par with his fellow in Olonets, also in regard to this matter.

To sum up, we see the immense improvement in the general economic conditions of existence we have observed in the whole of the present article as the immediate result of the emigration of the Russian peasant to Siberia is not merely an improvement on his former wretchedness. Far from that. Three years of by no means excessive labour, since the average number of colonists can support it, suffice for the famished peasant of former days to become a land-holder, whose comfort rather exceeds than equals that of the average peasant even in the richest provinces of Russia in Europe.

#### § 7. RESULTS OF COLONISATION FROM THE POINT OF VIEW OF THE MOVEMENT OF POPULATION. CONCLUSION.

Although the work of home colonisation in Siberia is of recent date, the relatively considerable economic prosperity which is its first direct consequence has none the less already made its influence felt, under the most characteristic form of a greater average natural increase of the local population. We give below the figures on the subject collected by the Government enquiry.

TABLE VII. -- *Movement of Population in the Siberian Colonies*  
Studied by the Government Enquiry of 1911-1912.

Regions	Total Number of Inhabitants in the Colonies Studied			Average Residence of the Colonists in the Colonies (in Years)	Annual Average Increase	
	At Date of the Enquiry (1911-1912)	At First Establish- ment of Each Family	Increase	Individ- uals	%	
I. . . . .	52,095	40,770	11,325	8.5	1,332	3.3
II. . . . .	52,773	39,785	12,988	7.0	1,855	4.7
III. . . . .	45,918	39,534	6,384	6.0	1,664	2.7
IV. . . . .	27,718	24,456	3,262	7.0	466	1.9
All Colonies Studied . . . . .	178,564	144,545	33,959	7.0	4,717	3.3



Thus in the seven years representing the average residence of the colonists in their new home, the natural increase in the population was 3.3 % per ann. In the fourteen years between the date of the last general census of the Russian population and that of the Government enquiry the corresponding average increase for the whole Empire had been 2.2 % per ann. In other words, then, the average annual increase of the population of the Siberian Colonies exceeds by 50 % that of the whole Empire.

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The circumstances just considered give a positive answer to the question we asked ourselves at the beginning of the present article. We shall not therefore continue further our examination of the wealth of statistics collected by the Government enquiry in relation to the general economic conditions of the life of the Siberian Colonists.

It is now established that these colonists have derived considerable benefit by the transfer of their activity from Russia in Europe to Siberia. These advantages consist, in the first place, in an increase in the area of the arable land at their disposal to four times that they before possessed. And with this there is a scarcely less considerable increase in their personal estate. Removal to Siberia and the expense of initial establishment occasion each family of colonists an average loss of 78 roubles. But the revenue from the farm is not slow in making up for this and even enables the colonist to develop his resources in a way hitherto absolutely unknown. We have seen that at the end of a few years the capital represented by buildings and live and dead stock, possessed by each colonist is on an average twice what it was before emigration. Finally, the material conditions of daily life are altered in as radical a manner. When he has become a colonist in Siberia, the small farmer, who formerly, in his native district, could not always manage to satisfy his hunger, rapidly arrives at a position which permits of his feeding himself better than the average peasant of the European provinces of the vast Empire.

And, let us observe, all these results, among the happy consequences of which we have noted the average natural increase of the population of Siberia, have been obtained in quite the first stage of colonisation under State direction, at a moment when, in spite of the enormous progress made each year, rural economy in Siberia is far from having attained its full development.

The results up to the present are, in the highest degree, satisfactory. In the future they will certainly be more so. The continual increase in the area under cultivation, in the money and stock possessed by the colonists, the improved methods of cultivation and the increased yield from the land resulting therefrom, the daily intensified action of the Government in regard to means of communication, transport, credit, industry and general cultivation in these formerly neglected regions, all lead us to expect continually more rapid and complete progress in the future and a further increase of the general prosperity already so notable among the colonists of Siberia.

## NOTICES OF SOME RECENT PUBLICATIONS RELATING TO AGRICULTURAL ECONOMY IN GENERAL.

### UNITED STATES.

BROOKS (ROBERT PRESTON), PH. D. : *THE AGRARIAN REVOLUTION IN GEORGIA. 1865-1912.*  
*Bulletin of the University of Wisconsin.* Madison, Wisconsin, 1914.

The "period of reconstruction" in the South, following the close of the Civil War, has always proved attractive to the student and the historical essayist. Unfortunately, the political events and movements — and in particular the political scandals — of the period have attracted an unduly large share of attention, with the result that the social and, to an even greater extent, the economic changes which resulted from the emancipation of the negro have never been fully traced.

The author of the present volume dismisses the carpet-bagger and all he represents in a couple of sentences, and goes straight to his purpose, which is to show what were the effects of emancipation upon land tenure in Georgia.

He describes first the failure of the attempts to continue the plantation system with free negro labour, and here his analysis of the causes to which failure is to be attributed is exceedingly well done. He next traces the gradual development of share-tenancy, and then of cash-tenancy and ownership; and, finally, he seeks to explain the changes in the relative importance of whites and negroes in the population of the various distinct farming regions into which Georgia is divided by conditions of soil, climate and altitude.

The author succeeds in throwing some new light upon many of the points with which he deals. Thus he points out that the negro in refusing to work under the plantation system was inspired not so much by hatred of work as by hatred of supervision; and the distinction is of great importance, for if means can be found to make such supervision effective without being irksome a great many difficulties would be removed, and a great many much-needed improvements might be effected in Southern agriculture. It is interesting to learn, too, that here and there the plantation system continued almost without interruption after emancipation, and that where this was the case, success was to be attributed to the superior energy, ability and intelligence of the overseer; so that, undoubtedly, the system

proved unworkable partly because the overseers as a body did not possess the necessary ability. They could handle slave labour; but they were unequal to the task of directing free labour. Again, it is rather a surprise to find that the author contrasts the "evils of tenancy", not with the advantages of ownership, but with the advantages of the crop-sharing system in which the share-tenant or "cropper" is practically a labourer working under the direction of the owner of the farm. Yet the arguments adduced in favour of crop-sharing are apparently conclusive. Where the owner shares the crop he directs all the farming operations, determining what crops shall be sown, when and how they shall be sown, how they shall be cultivated and when they shall be gathered. He provides a mule and sufficient feed to keep it in good condition, together with farm implements and manures. The share-tenant furnishes nothing but his own labour. Under this system it is possible to follow an intelligent rotation of crops, maintain the permanent fertility of the soil and secure, year by year, a fair return to both the capital and the labour employed.

Unfortunately when the share-tenant, under the intelligent direction of the landlord, has accumulated sufficient money to buy a mule and a few implements, he invariably seeks to rent a holding as a cash tenant; and then it usually follows that cotton and nothing else is grown, the land is not suitably manured, fences and buildings are neglected, the crop is badly cared for, and, at the end of a year's work, the tenant is probably more heavily in debt than at the beginning. Very often he is turned out of his holding after one or two seasons and begins again as a share-tenant.

Prof. Brooks writes of the negro with sympathy and with intimate knowledge. He does not believe that the coloured farmer (except in very exceptional cases) does well in an independent position as an owner, or in a semi-independent position, as a cash tenant, but he has no thought of denying to the negro the right to fill any position for which he proves himself fitted. In any study which deals with the relations between negro and white in America the question of tone is everything; and in this respect the present volume is unexceptionable.

HOFFMAN (FREDERICK L.), LL. D.: *THE ECONOMIC PROGRESS OF THE UNITED STATES DURING THE LAST SEVENTY-FIVE YEARS. Quarterly Publications of the American Statistical Association.* New Series, No. 108. December, 1914. pp. 294-318.

The writer of this article succeeds in condensing into twenty-five pages a mass of statistical information relating to the "verifiable progress" of the United States, — using the word progress (as he explains) in the true and inconvertible acceptance of the term to mean "improvement in the economic condition of the body of the people". He has chosen the year 1840 for no reason other than that the Census of that year marks the beginning of a concerted effort to ascertain, in the decennial enquiry, something beyond the mere number of persons of each sex and of various ages which

from the total population. He presents data relating to number, nationality and occupations of the people, wages and hours of labour, the growth of agriculture, mining and manufactures, Government revenue, public debt, education, banking, life insurance, etc.

Summarising the conclusions to be drawn from his statistics, Dr. Hoffmann finds abundant matter for congratulation. "The evidence," he says, "is incontrovertible that on the whole there has been measurable progress in the United States in every important direction affecting the material well-being of the people." He finds that production in agriculture and manufactures has increased considerably, and more than proportionately to population, with higher wages, shorter hours of labour, and comparative freedom from demoralizing irregularities of employments; that statistics of education give evidence of the intellectual progress of the nation; that there is a wide diffusion of thrift, shown by the statistics of building societies and life insurance companies; that the per capita wealth is greater in the United States than in any country in the world; and that nowhere in the world is to be found a more prosperous agricultural population.

Turning next to the evidence of absence of progress he adduces the falling birth rate and the diminishing size of the American family, a rising divorce rate, an apparent increase in lawlessness and crime, a diminishing mercantile marine and the enormous waste of natural resources which admittedly has taken place.

The writer has not confined himself to the publications of the Bureau of the Census, but has made use also of the results of special investigations carried out by the Bureau of Labour and of the vast amount of information collected by the United States Immigration Commission. His article will be welcomed by the many people who have occasional use for statistics, especially comparative and progressive statistics such as are here presented, — but who lack the time (and perhaps also the training) necessary for the interpretation of figures presented in bulk.

#### GREAT BRITAIN AND IRELAND.

WORK FOR THE LAND. I. A GROWING PROBLEM: CATTLE INSTEAD OF CORN. II. MACHINERY: WAGES AND WAR PROFITS. III. CONCLUSION: STOCK FARMING ON ARABLE LAND. The Times. London. April 12th., 13th., 14th., 1915.

These three articles by the distinguished agricultural writer who contributed to the *Times* the valuable series of articles entitled "A Pilgrimage of British Farming," deal with a problem which was becoming increasingly difficult before the war and has been rendered more acute by the war itself.

The writer notes that whereas, during the period of agricultural depression, there was a steady conversion of arable land into grass, the period of rising prices and growing prosperity beginning in 1894 has not been attended by a reversal of the procedure, and the area of arable land has continued to fall year by year, and even the number of live-stock has tended to decline. Though the farmers of the country have been making money since 1900 they have not been improving the character of their farming. It would seem that they have not been investing their profits in their farms. Some have continued to conduct their farms in the traditional way; others have lacked confidence in the future of farming and preferred to invest their savings in industrial securities.

One reason for the continued laying down of land to grass has been the high price of milk, but most of all the increasing scarcity of labour has been the cause at work. This has been due to growing industrial prosperity which attracted the boys of the country to the better-paid industries in the towns; to emigration to Canada as a result of the efforts of the Canadian Governments, and to the reduction in the supply of Irish migrant labourers owing to the settlement of the land question in Ireland. When the scarcity wages had risen by about 2s. a week before the war, this was not sufficient to meet the increased cost of living or the competition of other industries.

The scarcity of farm labour was much accentuated by the outbreak of the war. It is estimated that 8 per cent of the male population of the land has enlisted, and those who have done so are the most active and able-bodied. Enlistment has also affected the supply of casual labour required for the spring work; in fact, this reserve of labour has practically disappeared.

The writer strongly urges an immediate and substantial rise of wages as the only means of keeping the active labourers on the land. At present prices, he maintains, wages could be increased by half and the farmer would still be left a more than equivalent war profit to the farmer. The risk, it is true, is that a fall of prices may set in with the next harvest but it would be a very safe speculation to assume that prices will be maintained at a level which would cover a general rise in wages of 5s. a week. The writer also counsels the increased use of machinery, arguing that the power of each man employed in cultivating the soil could be doubled if he were made more of a machine-minder and less of a manual labourer.

As a further step towards preventing the putting down of land to grass, the writer of the article advocates the system of arable farming for cattle food, originated by Mr. T. Wilberley. This system results in more intensive farming and a higher production from the land while taking advantage of the greater returns to be derived from milk and meat than from corn.

ITALY.

D'ALESSANDRI (ALESSANDRO): GLI USI CIVICI NELLA PROVINCIA ROMANA (*Civic Uses in the Province of Rome*). Rome, Tip. della Camera dei Deputati, 1915. pp. 39.

In this monograph the author deals briefly and lucidly with the origins of the various civic uses in the Province of Rome. After having treated of the provisions and consequences of the Pontifical Notice of December 29th., 1849, he speaks of the more recent Italian laws of June 24th., 1888 and August 4th., 1894, pointing out their defects, and noting the disadvantages of what is called the provisional law of March 8th., 1908 (*leggiua provvisoria*). He deplores the agitations and the inroads on landed estates, which arrest and render impossible all agricultural progress and expresses his desire for the speedy presentation of the expected new bill to regulate the old question of civic uses and establish a more reasonable basis for collective ownership. The new movement warmly advocated by the author should be based on the Circular of the Minister Nitti, of February 7th., 1914 and thus contain a programme founded upon the necessity of settling the families of the occupiers on land to be improved and maintaining them there until they have benefited by the improvements made.

RUGGERI ALFREDO, gerente responsabile.